

PRESENTED BY

*University*














Digitized by the Internet Archive  
in 2012 with funding from  
University of Illinois Urbana-Champaign









378,753 03

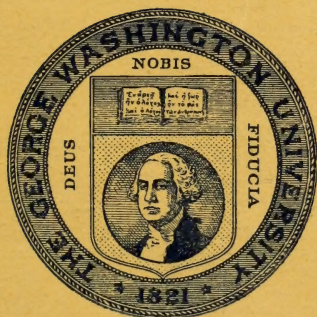
VOLUME XII

NUMBER 1

GWHI

The  
George Washington University  
Bulletin

CATALOGUE NUMBER



PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C., MARCH,  
JUNE, OCTOBER, AND DECEMBER

Entered October 6th, 1904, at Washington, D. C., as second-class  
matter under Act of Congress of July 16th, 1894

P





THE  
GEORGE WASHINGTON UNIVERSITY  
BULLETIN

CATALOGUE NUMBER

MARCH 1913

BALTIMORE  
WILLIAMS & WILKINS CO.

1913

WY

THE  
JOHN DEERE  
LIBRARY

## CONTENTS

<b>PART I. GENERAL AND HISTORICAL:</b>	<b>PAGE</b>
Calendar.....	8
Legal History (Charter).....	9-19
By-Laws.....	20-24
Ordinance.....	25-27
Trustees.....	28-29
Administrative Officers.....	30
President's Council.....	31
Teaching Staff.....	32-38
Organization.....	38
Library.....	38
 <b>PART II. DEPARTMENTS OF THE UNIVERSITY:</b>	
Department of Arts and Sciences.....	43-109
The School of Graduate Studies.....	45-49
The Colleges.....	49-78
Columbian College.....	65-71
The College of Engineering and Mechanic Arts....	71-75
Teachers College.....	76-78
Courses of Instruction.....	79-109
Professional Departments:	
Department of Law.....	110-124
Department of Medicine.....	125-156
Department of Dentistry.....	157-168
 <b>PART III. THE ASSOCIATED COLLEGES:</b>	
National College of Pharmacy.....	171-175
College of Veterinary Medicine.....	176-188
 <b>PART IV. STUDENTS:</b>	
Department of Arts and Sciences.....	191-217
School of Graduate Studies.....	191-197
The Colleges.....	197-217
Department of Law.....	217-229
Department of Medicine.....	230-233
Department of Dentistry.....	233-235
National College of Pharmacy.....	235-237
College of Veterinary Medicine.....	237-238
Geographical Distribution.....	239



## MISCELLANEOUS:

General Summary.....	240
Degrees Conferred 1912-13.....	241, 242
Allied Associations.....	243-245
Directory.....	247-252
Index.....	253-255

**PART I**  
**GENERAL AND HISTORICAL**





1913							1914													
JULY							JANUARY							JULY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	3	..	..	1	2	3	4	..
6	7	8	9	10	11	12	4	5	6	7	8	9	10	5	6	7	8	9	10	11
13	14	15	16	17	18	19	11	12	13	14	15	16	17	12	13	14	15	16	17	18
20	21	22	23	24	25	26	18	19	20	21	22	23	24	19	20	21	22	23	24	25
27	28	29	30	31	..	..	25	26	27	28	29	30	31	26	27	28	29	30	31	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
AUGUST							FEBRUARY							AUGUST						
..	..	..	..	..	1	2	1	2	3	4	5	6	7	..	..	..	..	..	..	1
3	4	5	6	7	8	9	8	9	10	11	12	13	14	2	3	4	5	6	7	8
10	11	12	13	14	15	16	15	16	17	18	19	20	21	9	10	11	12	13	14	15
17	18	19	20	21	22	23	22	23	24	25	26	27	28	16	17	18	19	20	21	22
24	25	26	27	28	29	30	..	..	..	..	..	..	..	23	24	25	26	27	28	29
31	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..
SEPTEMBER							MARCH							SEPTEMBER						
..	1	2	3	4	5	6	1	2	3	4	5	6	7	..	..	1	2	3	4	5
7	8	9	10	11	12	13	8	9	10	11	12	13	14	6	7	8	9	10	11	12
14	15	16	17	18	19	20	15	16	17	18	19	20	21	13	14	15	16	17	18	19
21	22	23	24	25	26	27	22	23	24	25	26	27	28	20	21	22	23	24	25	26
28	29	30	..	..	..	..	29	30	31	..	..	..	..	27	28	29	30	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
OCTOBER							APRIL							OCTOBER						
..	..	..	1	2	3	4	..	..	..	1	2	3	4	..	..	..	..	1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	4	5	6	7	8	9	10
12	13	14	15	16	17	18	12	13	14	15	16	17	18	11	12	13	14	15	16	17
19	20	21	22	23	24	25	19	20	21	22	23	24	25	18	19	20	21	22	23	24
26	27	28	29	30	31	..	26	27	28	29	30	..	..	25	26	27	28	29	30	31
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NOVEMBER							MAY							NOVEMBER						
..	..	..	..	..	..	1	..	..	..	..	..	1	2	1	2	3	4	5	6	7
2	3	4	5	6	7	8	3	4	5	6	7	8	9	8	9	10	11	12	13	14
9	10	11	12	13	14	15	10	11	12	13	14	15	16	15	16	17	18	19	20	21
16	17	18	19	20	21	22	17	18	19	20	21	22	23	22	23	24	25	26	27	28
23	24	25	26	27	28	29	24	25	26	27	28	29	30	29	30	..	..	..	..	..
30	..	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..
DECEMBER							JUNE							DECEMBER						
..	1	2	3	4	5	6	..	1	2	3	4	5	6	..	..	1	2	3	4	5
7	8	9	10	11	12	13	7	8	9	10	11	12	13	6	7	8	9	10	11	12
14	15	16	17	18	19	20	14	15	16	17	18	19	20	13	14	15	16	17	18	19
21	22	23	24	25	26	27	21	22	23	24	25	26	27	20	21	22	23	24	25	26
28	29	30	31	..	..	..	28	29	30	..	..	..	..	27	28	29	30	31	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

# UNIVERSITY CALENDAR

1913

June 11 *Wednesday.*—University Commencement.

## SUMMER VACATION

September 24 *Wednesday.*—Academic Year begins in all Departments of the University.  
 October 8 *Wednesday.*—Stated meeting of the Board of Trustees.  
 October 20 *Monday.*—Last day for registration for the first term without late-registration fee.  
 November 27-29 *Thursday to Saturday,* both inclusive.—Thanksgiving recess.

## RECESS FROM DECEMBER 24, 1913, TO JANUARY 3, 1914, BOTH INCLUSIVE

1914

January 14 *Wednesday.*—Stated meeting of the Board of Trustees.  
 January 26 *Monday.*—Last day on which theses may be presented.  
 February 2 *Monday.*—Second Term begins.  
 February 9 *Monday.*—Doctorate Disputation.  
 February 20 *Friday.*—Last day for registration for the second term without late-registration fee.  
 February 23 *Monday.*—A holiday in all Departments of the University. Winter Convocation.  
 April 10-13 *Friday to Monday,* both inclusive.—Easter holidays.  
 April 14 *Tuesday.*—Davis Prize Speaking.  
 May 1 *Friday.*—Last day on which theses may be presented.  
 May 18 *Monday.*—Doctorate Disputation.  
 May 26-29 *Monday to Thursday.*—Examinations for admission.  
 May 30 *Saturday.*—A holiday in all Departments of the University.  
 June 3 *Wednesday.*—Annual meeting of the Board of Trustees.  
 June 7 *Sunday.*—Baccalaureate Sermon.  
 June 10 *Wednesday.*—University Commencement.

## THE LEGAL HISTORY OF THE CORPORATION

The George Washington University is the successor of the "Columbian College in the District of Columbia," which was chartered by Act of Congress in 1821. The name and title of the Columbian College were in 1873 changed by an Act of Congress, under the terms of which the College was given the name of the "Columbian University." The Columbian University was by Act of Congress in 1904 authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education. The Board of Trustees elected to take the name of "The George Washington University," and the name was approved by the government officials, as required by the statute; the change of name going into effect September 1, 1904. All the Acts of Congress now in force relative to the Columbian College and the Columbian University are therefore parts of the charter of The George Washington University.

The original charter of the Columbian College was as follows:

### **An Act to incorporate the Columbian College, in the District of Columbia**

*Be it enacted, &c.,* That there be erected, and hereby is erected and established, in the District of Columbia, a College, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, the "Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted,* That the said College shall be under the management, direction, and government of a number of Trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said College, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the College, on the first Monday in May; and that the first Trustees of the said College shall consist of the following persons, viz: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw: which said Trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style and title of the "Columbian College in the District of Columbia;" by which name and title, they, the said Trustees, and their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said College, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided,* The same do not exceed, in the whole, the yearly



value of twenty-five thousand dollars; and the same messuages, lands, tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm let, and place out on interest, for the use of the said College, in such manner as to them, or at least nine of them, shall seem most beneficial to the institution, and to receive the rents, issues, and profits, income and interest, of the same, and to apply the same to the proper use and benefit of the said College; and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted*, That the said Trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the said College, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted*, That the said Trustees, or five of them at least, shall meet at the College, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this Act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said Trustees held twice in every year at least, at such place and time as the said Trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the President, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if, at such stated or occasional meetings, five of the said Trustees shall not be present, those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually, to all intents and purposes, as if the whole number of Trustees for the time being were present; but, if five or more of the said Trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said Trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said College not otherwise provided for by this Act; and particularly of making and enacting ordinances for the government of the said College; of electing and appointing the President, Professors, and Tutors, for the said College; of agreeing with them for their salaries and stipends, and removing them for misconduct, or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the Board; of appointing a President, Treasurer, Secretary, stewards, managers, and other necessary and customary officers, for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said Trustees, consisting of five persons at least, at any semi-annual, occasional, or adjourned meeting, after notice, given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise, and be incidentally necessary to be determined and transacted by the said Trustees *Provided always*, That no ordinances shall be of force which shall be repugnant to this charter, or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted*, That the head or Chief Master for the said College shall be called and styled the "President," and the Masters thereof shall be called "Professors and Tutors;" but neither President, Professors, or Tutors, while they remain such, shall ever be capable of the office of Trustee.

SEC. 6. *And be it further enacted*, That the President, Professors and Tutors, or a majority of them, shall be called and styled the "Faculty of the College," which Faculty shall have the power of enforcing the rules and regulations adopted by the Trustees for the government of the pupils, by rewarding or censuring them, and finally, by suspending such of them who as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the Trustees can be had; and of granting and confirming, by and with the approbation and consent of a board of the Trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution or others, who, by their proficiency in learning, or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant to such graduates, diplomas or certificates, under their common seal, and signed by the Faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted*, That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted*, That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest, to or from the said corporation: *Provided*, The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted*, That the constitution of the said College, herein and hereby declared and established, shall be, and remain, the inviolate constitution of the said College forever; and the same shall not be altered or alterable by any ordinance or law of the said Trustees: *Provided*, That it may be lawful for the Congress of the United States to revoke and repeal this Act, at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted*, That it shall be the duty of the said Board of Trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations, which may be adopted by the said Board, for their own government, and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said Trustees, for the use of the said College, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said Trustees, to cause to be enrolled, in the said book or journal, the names of all the contributors to the institution qualified to vote for Trustees, with their respective places of residence; and the said book or journal shall, at all times be open to the inspection or examination of the Attorney General of the United States; and, when required by either House of Congress, it shall be the duty of said Trustees to furnish information respecting their own conduct, the state of the institution, and of its finances, which shall or may be so required.

SEC. 11. *And be it further enacted*, That in case any vacancy or vacan-

cies shall happen in the Board of Trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other Trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted*, That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this Act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this Act, and the same shall, thenceforth, cease and become null and void.

Approved, February 9, 1821.

By Act of Congress of July 14, 1832, there were donated to the Columbian College Washington city lots to the value of twenty-five thousand dollars; the Act providing that the fund arising from the proceeds of the sale of the lots should constitute an endowment fund for the support of professorships. By Act of February 28, 1839, permission was granted to the College to use seven thousand dollars of the fund for the payment of its debts.

By Act of Congress of February 21, 1871, a form of government by an elected Governor and Legislative Assembly was established for the District of Columbia, and on July 25, 1871, the Legislative Assembly passed the following statute:

**An Act for the relief of the Columbian College, in the District of Columbia**

*Be it enacted by the Legislative Assembly of the District of Columbia*, That the Columbian College, in the District of Columbia, chartered by and organized and acting under the Act of Congress approved February nine, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted*, That the Trustees of said College elected in May last shall constitute the corporation of said College until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted*, That the said Trustees shall meet in the Law Building of said College at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing, and shall then and there, or at the time and place to which said meeting may be adjourned, elect thirteen Trustees and thirteen Overseers, who shall, upon their election, constitute the College corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted*, That the Trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of Trustees and Over-



seers to be thereafter held in said City of Washington on the Tuesday next preceding the last Wednesday in June, annually, the Trustees and Overseers in convention assembled shall fill vacancies in their Board, and shall, by ballot, elect from among the Trustees two suitable persons, one to be President and the other to be Treasurer and Secretary of said corporation and of the Board of Trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the College Faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and President, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted*, That at said annual meetings not less than seven Trustees and three Overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any number present: *Provided*, That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted*, That during the interval between said annual meeting the Trustees shall, as now, hold semi-annual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the Faculty or in their own Board, and with all their present powers as modified by this Act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the Trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

This Act of the Legislative Assembly of the District was confirmed by Congress in 1873, and by the same statute the College was given the name of "the Columbia University." This Act was as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College in the District of Columbia**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known and called by the name of the Columbia[n] University, and in that name shall take, hold and manage all the estate and property now belonging to said College, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction of the yearly value of the property of the said corporation to the sum of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its Overseers to twenty-one, and the number of its Trustees to twenty-one, exclusive of the President of the Faculty, who shall be, *ex officio*, a Trustee of said corporation.

SEC. 2. That the Act for the Relief of the Columbian College in the District of Columbia enacted by the Legislative Assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That this Act nor the said Act of the Legislative Assembly of the said District, shall be so construed as to authorize the said Columbian University to sell, or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the Act

of Incorporation and the Act granting any such land or real estate, or contrary to any will, devise or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

Approved, March 3, 1873.

By the Act of Congress of May 31, 1878, it was provided that the annual meeting of the corporation might be held either in May or June, and by the Act of January 14, 1893, it was provided that the Secretary and the Treasurer might be elected from the Trustees or not, as the Board of Trustees might deem proper, and that it should not be necessary that both offices should be held by one person.

In 1898 Congress amended the charter by an Act as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and control of a Board of Trustees, consisting of twenty-two members; the President of the University shall be *ex officio* a member of said Board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said Board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the Trustees and Overseers of said University shall be held, and said meeting shall elect twenty-one Trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said Trustees so elected shall serve for the periods mentioned and until their successors are elected. That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present Trustees and Overseers shall cease and determine and thereupon the control and management of said University, its property and trusts, shall vest in the Board of Trustees elected as hereinabove provided and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the Board of Trustees seven Trustees to fill the places of the class whose terms of office expire; and the Board of Trustees may prescribe in a by-law the mode of nominating persons for election as Trustees. A failure to elect Trustees at the annual meeting shall not create vacancies in the Board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the Board at any general or special meeting.

SEC. 3. That the Board of Trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents,

and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the Trustees constituting said Board, adopt and change by-laws for the conduct of the business and educational work of said University; they may appoint an Executive Committee composed of Trustees, designate the number and Chairman thereof, with such powers and authority as are usually exercised by an Executive Committee, and which shall be conferred by the Board, subject always to the control of the Board of Trustees; they may create and establish schools and departments of learning to be connected with and become a part of said University; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said University, and by any department and chair thereof now established or which may hereafter be created or established by said University; and they shall have all the powers and authority heretofore granted to and vested in the Trustees and Overseers of said University.

SEC. 4. That the annual meeting of the Board of Trustees shall be held in the City of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the President of the University or by the Executive Committee or by seven members of the Board of Trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the Trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those Trustees not present.

SEC. 5. That the terms of office of the President of the University, the Treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the University shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the Board of Trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this Act are hereby repealed.

Approved, March 18, 1898.

In 1904 Congress passed an Act restoring the non-denominational character of the institution and permitting the change of its name. This Act and the certificate of change of name were as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory Act approved March eighteenth, eighteen hundred and ninety-eight, be and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory Act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said Trustees, and also the*



President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, re-enacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the Board of Trustees of said University to change the name of said University at any regular meeting by a vote of not less than two-thirds of the total number of members of the Board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the University, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the Recorder of Deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory Acts thereto.

SEC. 4. That all Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved, January 23, 1904.

**Certificate of Change of Name of the Columbian University to "The George Washington University"**

**DISTRICT OF COLUMBIA,**  
*City of Washington:*

The Columbian University, in accordance with the Act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its Board of Trustees, duly held on the eighth day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the Board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said Act of Congress, the name of this University be changed to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904.

And it is hereby further certified, that on the twentieth day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its



certificate under its corporate seal, at the City of Washington, D. C., on the twenty-first day of June, A. D. 1904.

Attest:

JOHN B. LARNER,  
*Secretary.*  
(Corporate Seal.)

CHARLES W. NEEDHAM,  
*President.*

UNITED STATES OF AMERICA,  
DEPARTMENT OF THE INTERIOR,  
WASHINGTON, D. C., *June 20, 1904.*

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the Department.

In testimony whereof, I have hereunto subscribed my name, and caused the seal of the Department of the Interior to be affixed, the day and year first above written.

E. A. HITCHCOCK,  
*Secretary of the Interior,*  
W. B. A.

(Seal of the Department of the Interior.)

Whereas by Act of Congress approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education;

And whereas it has been made satisfactorily to appear to us that, at the regular meeting of the Board of Trustees of said University, held on the eighth day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said Board, it was unanimously resolved to change the name of said University to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904;

Now, therefore, this is to witness that, pursuant to said Act of Congress, we do hereby, this twentieth day of June, A. D. 1904, approve said change of name.

E. A. HITCHCOCK,  
*Secretary of the Interior.*  
W. T. HARRIS,  
*Commissioner of Education.*

(Seal of the Department of the Interior.)

In 1905 a further amendment to the charter was made, as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time, by a two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of Trustees a certificate, stating the number of the Board and the time when it shall go into effect and that the action so taken was by two-thirds vote as required by this Act, shall be filed with the Recorder of Deeds of the District of Columbia, and upon and after the date named the Board shall consist of the number of Trustees, stated in such certificate, and said

Board may also appoint a Board or Boards of Visitors for any department or departments of educational work carried on by the University, such Boards of Visitors to be advisory only.

SEC. 2. That by and with the consent of said University, Colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such Colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a College hereunder, may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: First, the intention to organize a corporation under this Act and the assent of the University thereto; second, the name or title by which the College shall be known in law; third, the names of the Trustees constituting the first Board, and such Trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said Trustees; fifth, the branch or branches of literature, arts, sciences, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said College shall be a Dean, the Dean and members of the Faculty to be members of the Educational Councils of the University in accordance with the rules governing the University; seventh, that all degrees shall be bestowed by the University; eighth, that in all financial and legal responsibility the College shall be an independent organization. Upon filing such certificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the College to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the University regulating the conduct of educational work, as may be deemed necessary for the government of the College, but said College shall not confer academic or honorary degrees; such College shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequests solely for the purposes of the educational work specified in said certificate; the Trustees of such College shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the College.

SEC. 3. That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University and the Departments of the Government in the City of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions.

Approved, March 3, 1905.

Under section 2 of the Act of 1905, there now exist two colleges which are doing special educational work and which are in active operation—the National College of Pharmacy, organized in 1905, and the College of Veterinary Medicine, organized in 1908. The financial affairs of these Colleges are separate from those of the University, and are managed by their separate Boards of Trustees. The Faculties of these Colleges are also appointed by their respective Boards of Trustees. The connection between these Colleges and the University consists in the fact that their Deans are members of the President's Council, and that the Board of Trustees of the University confers degrees for the work done in these Colleges.

By resolutions of the Board of Trustees of the University of May 6, 1909, and January 12, 1910, provision was made for the nomination by the Alumni of two Alumni Trustees each year. In the spring of 1910, this plan was put in operation, and since then the two persons annually nominated as Alumni Trustees have been elected to membership on the Board.

# BY-LAWS OF THE GEORGE WASHINGTON UNIVERSITY

## ARTICLE I

### *The President of the University*

SECTION 1. The President of the University shall hold office without limit of time, until his resignation be accepted, or he be removed from office by the Board of Trustees; he shall be the executive head of the University and of all its departments, exercising such supervision, direction, and control as will promote the efficiency of every department; he shall be responsible, under the supervision of the Board of Trustees, for the discipline of the University; he shall preside at the meetings of the Faculties, and be the official medium of communication between the Faculties and the Board of Trustees, and between the students of the University and the Board of Trustees; he shall recommend to the Board of Trustees appointments to the several Faculties; he shall be responsible for carrying out such measures concerning the internal administration of the University as the Board of Trustees may enact. He shall make a yearly report to the Board of Trustees at the January meeting concerning the state of the University. He shall control the expenditure and administration of the yearly budget when formally adopted by the Board of Trustees.

## ARTICLE II

### *Board of Trustees*

SECTION 1. No member of the teaching staff of the University except the President of the University, or of the teaching staff of any college incorporated under the charter of the University, while he remains such, shall be capable of holding the office of Trustee of the University.

SEC. 2. At the annual meeting of the Board after the election of Trustees, the Board shall elect by ballot from among their number a Chairman and Vice-Chairman of the Board to serve until the next annual meeting and until their successors are elected and qualified. The Chairman of the Board, and in his absence the Vice-Chairman, shall preside at all meetings of the Board of Trustees.

SEC. 3. At the annual meeting after the election of Trustees the Board shall elect by ballot the following officers, to serve until the next annual meeting and until their successors are elected and qualified: a Secretary, a Treasurer, an Auditor, and a Counsel of the University.

SEC. 4. In the event of a failure for any reason so to elect either or



all of the said officers, or in case of any vacancy from any cause, then an election may be held for the unexpired term at a meeting called for that purpose.

SEC. 5. The annual meeting of the Board of Trustees shall take place on the Wednesday nearest the first day of June of each year.

SEC. 6. Stated meetings of the Board shall be held on the second Wednesdays of October and January.

SEC. 7. Notice of all stated meetings shall be mailed by the Secretary of the University to each member of the Board at least five days previous to the time of such meetings.

SEC. 8. Special meetings may be called at any time by the President of the University, the Executive Committee, or by seven members of the Board of Trustees. The Secretary shall issue the notices of such meetings.

SEC. 9. The call for special meetings shall state the nature of the business to be considered, and shall be mailed at least two days before the meeting is to be held.

SEC. 10. Seven members of the Board of Trustees shall constitute a quorum for the transaction of any business.

### ARTICLE III

#### *Executive Committee*

SECTION 1. There shall be an Executive Committee of seven members of the Board of Trustees, of which the President of the University shall be Chairman *ex officio*. The other members of the committee shall be elected by ballot at the annual meeting, and shall serve until their successors are elected.

SEC. 2. In case of inability to act on the part of any member of the Committee his place may be filled by the Board of Trustees.

SEC. 3. Four members of the Committee shall constitute a quorum for the transaction of business.

SEC. 4. The Committee is authorized to transact such business as may require attention between the regular meetings of the Board of Trustees; but the Chairman of the Committee shall make report at each stated meeting of the Board on the proceedings of the Committee during the intervening period, and at any meeting of the Board, if any member of the Board shall request that the report of the proceedings of any meeting or meetings of the Committee be read, the same shall be read by the Secretary.

SEC. 5. Regular meetings of the Committee shall be held during the academic year monthly, and special meetings may be called by the Secretary whenever requested by the Chairman or any two members of the Committee.

SEC. 6. In case of inability to act on the part of the Chairman of the Committee, the Committee may appoint a temporary chairman for the meeting.

## ARTICLE IV

*Finance Committee*

SECTION 1. There shall be a Finance Committee of three members of the Board of Trustees who shall be elected at the annual meeting to serve until their successors are elected.

SEC. 2. The Committee shall invest and reinvest University funds, and shall exercise general supervision over the Treasurer's office, making report at every regular meeting of the Board of Trustees.

## ARTICLE V

*Visiting Committees*

SECTION 1. At the annual meetings there shall be appointed a Committee of three members for each school or department of the University, who shall visit and inspect the condition and conduct of the school or department and make a written report thereon to the stated meetings of the Board of Trustees.

## ARTICLE VI

*The Secretary of the University*

SECTION 1. The Secretary of the University shall as such attend and keep minutes of all meetings of the Board of Trustees, the Executive Committee, the educational council and faculties, as may by resolution of the Board be required to keep records. He shall give to any meeting at which he is entitled to be present any information concerning University affairs which he may have and which may be proper to be brought before such meeting. He shall have the custody of all the files and records of the University proper to his office; he shall have the custody of the corporate seal of the University, and shall affix it to corporate acts authorized by the Board of Trustees or the Executive Committee, and he shall generally do and perform such administrative duties as may be assigned him by the President from time to time not inconsistent with the by-laws.

## ARTICLE VII

*The Treasurer of the University*

SECTION 1. The Treasurer shall give bond or shall be bonded in a surety company, at the expense of the University, for the faithful performance of his duties in such sum and with such sureties as shall be approved by the Board of Trustees.

SEC. 2. He shall keep all the funds of the University in such bank or banks as the Board of Trustees shall designate; he shall keep the trust funds, and the full account thereof, separate from the current or general funds and accounts of the University; he shall make monthly statements, showing the current financial operations and the condition of the trust funds and other invested funds to the Executive Committee; he shall

make a full report annually to the Board of Trustees as specified in Article XI, and he shall at such other times make such reports as the Trustees may require.

SEC. 3. He shall make payments only by checks upon the bank countersigned by the President of the University, or in his absence by the Secretary, and only for investments, salaries, bills, and expenses authorized by the Board of Trustees or the Executive Committee, provided, however, that when the Treasurer is absent or incapacitated, or when the office of Treasurer is vacant, or when the President and Secretary are both absent or incapacitated, or in any other emergency, the Executive Committee may by resolution make special and temporary arrangements for the signing or countersigning of checks.

#### ARTICLE VIII

##### *The Auditor of the University*

SECTION 1. The Auditor of the University shall make three audits each year of the books and accounts of the Treasurer. The fiscal year shall end at midnight on August 31 of each year, and the accounts shall be audited as of December 31, April 30, and August 31 at midnight.

SEC. 2. A corporation may be elected by the Board of Trustees as the Auditor of the University.

#### ARTICLE IX

##### *The Counsel of the University*

SECTION 1. The Counsel of the University shall render opinions to the President, the Board of Trustees, or to the Executive Committee, when requested, upon legal questions arising in the management of the educational or business affairs of the University, and shall represent the University in all legal proceedings prosecuted by or against the University. The Counsel of the University may be a member of the Board of Trustees.

#### ARTICLE X

##### *Committee on Catalogue*

SECTION 1. Each year the annual catalogue of the University shall be prepared by a committee consisting of the President of the University as Chairman, the Secretary of the University, and three members of the Faculty of the University appointed by the President. The Catalogue shall be published annually in pamphlet form. Each annual catalogue shall contain the charter and by-laws of the University.

#### ARTICLE XI

##### *Annual Financial Report*

SECTION 1. Between July 1 and October 1 in each year there shall be prepared by the Treasurer a financial report showing in detail the

financial condition of the University during the previous year, which financial report shall be certified by the Auditor to be correct. This report shall be laid before the Board of Trustees at their October meeting, and when approved by the Board of Trustees shall, with any modifications ordered by them and assented to by the Treasurer and Auditor, be printed by the University in pamphlet form.

## ARTICLE XII

### *Sale of Land and Other Assets*

SECTION 1. Real estate and other securities of the University shall not be sold or disposed of except by direction of the Board of Trustees.

SEC. 2. All deeds and conveyances of real estate belonging to the University shall be signed by the President of the University and the Secretary, and the same shall be acknowledged, attested, and the seal of the University attached thereto by the Secretary.

## ARTICLE XIII

### *Amendments*

SECTION 1. These by-laws may be amended or repealed at any meeting of the Board by a vote of the majority of all members of the Board, provided notice of the proposed amendment or change has been sent to each member of the Board at least five days before the meeting.

## ARTICLE XIV

### *Former By-Laws Repealed*

SECTION 1. All by-laws heretofore enacted are hereby repealed.



# ORDINANCE

## ARTICLE I

### *Organization*

SECTION 1. The educational work of the University shall be divided into departments, and again subdivided into colleges or schools. The departments, colleges, and schools forming an integral part of the University are as follows: The Department of Arts and Sciences, comprehending the School of Graduate Studies, Columbian College, the College of Engineering and Mechanic Arts, the Teachers College; the Department of Law; the Department of Medicine; the Department of Dentistry. These departments, colleges, and schools are subject to the Board of Trustees represented by the President of the University, and unless otherwise noted, to the rules and regulations herein set forth.

SEC. 2. Associated colleges organized in accordance with the charter of the University on independent financial foundations are under the immediate control of their respective Boards of Trustees, subject in educational matters to the authority of the President and the University Board of Trustees. The National College of Pharmacy and the College of Veterinary Medicine are such associated colleges.

SEC. 3. The Department of Medicine, including the School of Medicine and the University Hospital, and the Department of Dentistry are organized under special ordinances of the Board of Trustees, and are subject to the rules and regulations of this ordinance only where the special ordinances governing them do not conflict with this ordinance.

## ARTICLE II

### *Faculties*

SECTION 1. Each department, college, and school shall be under the immediate charge of a faculty subject to the authority of the President's Council. The faculties shall recommend to the Board of Trustees candidates for degrees, diplomas, certificates, and awards.

SEC. 2. Each faculty shall be composed of all the Professors, Assistant Professors, and Instructors who teach in the department, school, or college under the charge of that faculty, and of such other members as the faculty may, on the recommendation of the Dean, with the approval of the President, admit to membership. The President shall be *ex officio* a member of each faculty, and the Secretary shall *ex officio* have voice at all faculty meetings, but no vote.

SEC. 3. A faculty may, at its discretion, delegate any of its purely administrative powers to an executive committee of which a Dean shall be Chairman, the members of which shall be nominated by that Dean and appointed by the President. Every executive committee shall be subject to the authority of the faculty from which it is appointed.

### ARTICLE III

#### *President's Council*

SECTION 1. The President's Council shall have charge of all administrative educational questions, subject to the confirmation of the Board of Trustees.

SEC. 2. The President's Council shall be responsible for the coördination of work throughout the University and shall have immediate jurisdiction over every administrative educational question touching the interests of more than one department, college, or school.

SEC. 3. The President's Council shall be composed of the President of the University, the Secretary of the University, and of all the Deans in the University, *ex officio*, and of a representative or representatives from each department, college, and school of the University to be elected annually by the faculties of the respective departments, colleges, and schools; those departments, colleges, and schools with a registration of less than two hundred students having one representative, those with more than two hundred students having two representatives.

### ARTICLE IV

#### *Deans*

SECTION 1. The Dean of each department, college, or school shall be appointed by the Board of Trustees from among the members of its faculty. The Dean shall, under the President, be the chief executive officer of his department, college, or school. As such he shall have authority in his department, college, or school to enforce such regulations as may be imposed by the Board of Trustees or the Faculty. He shall be held responsible for the proper preparation and conduct of the business of his department, college, or school, and for the performance of such administrative duties as pertain to his office and may be required of him by the President. He shall make annual written reports to the President.

### ARTICLE V

#### *Titles of the Teaching Staff*

SECTION 1. The academic titles of those engaged in teaching shall be Professor, Assistant Professor, Instructor, Assistant, Demonstrator, and Lecturer. The word "Associate" may be prefixed to any title where, under the terms of this ordinance, it is appropriate, and in the Department of Medicine this title may be used as provided in the special ordinances governing that department.

## ARTICLE VI

*Appointments*

SECTION 1. Instructors, Assistants, Demonstrators, and Lecturers shall, in the absence of agreement to the contrary, be appointed annually, with such compensation as shall be fixed by the Board of Trustees at the time of the appointment.

SEC. 2. Assistant Professors shall not be appointed for more than three years, subject to removal in accordance with the provisions of the charter of the University, and shall serve as Assistant Professors for at least three years before being eligible for promotion to a professorship.

SEC. 3. Professors shall be appointed without limit of time, subject to removal in accordance with the provisions of the charter of the University.

## ARTICLE VII

*Academic Year*

SECTION 1. The academic year shall begin on the last Wednesday of September, and shall end on the Wednesday following the annual meeting of the Board of Trustees.

## THE BOARD OF TRUSTEES

CHARLES HERBERT STOCKTON, LL.D.

*President of the University*

1913

HENRY GUSTAV BEYER, M.D., Ph.D., Stoneleigh Court  
ALDIS BIRDSEY BROWNE, LL.B., 1419 F Street  
ARCHIBALD HOPKINS, A.M., LL.B., 1826 Massachusetts Avenue  
THOMAS SNELL HOPKINS, LL.B., Hibbs Building  
\*WILLIAM BRUCE KING, A.M., LL.M., 1708 S Street  
\*AUGUSTUS STORRS WORTHINGTON, LL.B., 416 Fifth Street

1914

CHARLES BERGER CAMPBELL, Ph.D., M.D., 1731 Lamont Street  
\*HARRY CASSELL DAVIS, A.M., L.H.D., 1006 Massachusetts Avenue  
WILLIAM JAMES FLATHER, Riggs National Bank  
\*JOHN BELL LARNER, LL.B., LL.D., 900 F Street  
HENRY BROWN FLOYD MACFARLAND, 1420 New York Avenue  
WILLIAM HENRY SINGLETON, A.B., 2020 H Street

1915

GIST BLAIR, A.B., LL.B., Union Trust Building  
ABRAM LISNER, 1723 Massachusetts Avenue  
WILLIAM ANDREW MEARNS, LL.M., 2301 S Street  
\*THEODORE WILLIAMS NOYES, A.M., LL.M.,  
1101 Pennsylvania Avenue  
HENRY CLEVELAND PERKINS, 1701 Connecticut Avenue  
\*ALEXANDER TAIT STUART, A.M., The Wyoming  
MAXWELL VAN ZANDT WOODHULL, A.M., 2033 G Street

---

\* Nominated by the Alumni.



## CHAIRMAN OF THE BOARD OF TRUSTEES

JOHN BELL LARNER

## VICE-CHAIRMAN OF THE BOARD OF TRUSTEES

ARCHIBALD HOPKINS

## STANDING COMMITTEES OF THE BOARD OF TRUSTEES

*Executive.*—C. H. STOCKTON, H. C. DAVIS, W. J. FLATHER, A. HOPKINS,  
A. LISNER, W. H. SINGLETON, M. VAN Z. WOODHULL.

*Finance.*—W. J. FLATHER, A. HOPKINS, M. VAN Z. WOODHULL.

*Subscriptions and Endowments.*—A. LISNER, H. B. F. MACFARLAND, H. C.  
PERKINS, W. J. FLATHER, M. VAN Z. WOODHULL.

*Honorary Degrees.*—C. H. STOCKTON, H. G. BEYER, A. HOPKINS, H. B. F.  
MACFARLAND.

*Columbian College.*—W. H. SINGLETON, H. C. DAVIS, W. B. KING.

*Engineering and Mechanic Arts.*—H. C. PERKINS, M. VAN Z. WOODHULL,  
T. W. NOYES.

*School of Graduate Studies and Teachers College.*—A. T. STUART, G.  
BLAIR, H. G. BEYER.

*Law.*—J. B. LARNER, A. S. WORTHINGTON, H. B. F. MACFARLAND.

*Medicine, Dentistry, and Hospital.*—H. G. BEYER, J. B. LARNER, T. S.  
HOPKINS.

*Associated Colleges.*—T. S. HOPKINS, A. B. BROWNE, T. W. NOYES.

## ADMINISTRATIVE OFFICERS

### THE UNIVERSITY

*President.*—CHARLES HERBERT STOCKTON, LL.D.

*Secretary.*—RICHARD COBB, A.B.

*Offices.*—2023 G Street.

*Treasurer.*—CHARLES WENDELL HOLMES.

*Office.*—2024 G Street.

*Librarian.*—ALFRED FRANCIS WILLIAM SCHMIDT, A.M.

*Office.*—2023 G Street.

### DEPARTMENT OF ARTS AND SCIENCES

*Dean.*—HOWARD LINCOLN HODGKINS, Ph.D.

*Dean of Columbian College.*—WILLIAM ALLEN WILBUR, A.M.

*Dean of the College of Engineering and Mechanic Arts.*—HOWARD LINCOLN HODGKINS, Ph.D.

*Dean of Teachers College.*—WILLIAM CARL RUEDIGER, Ph.D.

*Offices.*—2023 G Street.

*Dean of the School of Graduate Studies.*—CHARLES EDWARD MUNROE, Ph.D., LL.D.

*Office.*—1325 H Street.

### DEPARTMENT OF LAW

*Dean.*—CHARLES NOBLE GREGORY, A.M., LL.D.

*Secretary.*—WILLIAM CABELL VAN VLECK, A.B., LL.B.

*Office.*—New Masonic Building.

### DEPARTMENT OF MEDICINE

*Dean.*—WILLIAM CLINE BORDEN, M.D.

*Librarian.*—HARRY KNOX CRAIG, M.D.

*Offices.*—1325 H Street.

### DEPARTMENT OF DENTISTRY

*Dean.*—JOHN ROLAND WALTON, D.D.S.

*Office.*—1325 H Street.

### NATIONAL COLLEGE OF PHARMACY

*Dean.*—HENRY E. KALUSOWSKI, M.D., Phar.D.

*Office.*—808 I Street.

### COLLEGE OF VETERINARY MEDICINE

*Dean.*—DAVID EASTBURN BUCKINGHAM, V.M.D.

*Office.*—2113 Fourteenth Street.

## PRESIDENT'S COUNCIL

(Arranged in Departmental Groups)

CHARLES HERBERT STOCKTON, LL.D.... PRESIDENT OF THE UNIVERSITY  
RICHARD COBB, A.B..... Secretary of the University  
CHARLES EDWARD MUNROE, Ph.D.,

Dean of the School of Graduate Studies

HERMANN SCHOENFELD, Ph.D., LL.D..... Professor of German  
WILLIAM ALLEN WILBUR, A.M..... Dean of Columbian College  
CHARLES CLINTON SWISHER, Ph.D., LL.D..... Professor of History  
GEORGE NEELY HENNING, A.M..... Professor of Romance Languages  
HOWARD LINCOLN HODGKINS, Ph.D.,

Dean of the College of Engineering and Mechanic Arts

OSCAR ALEXANDER MECHLIN, C.E..... Professor of Civil Engineering  
WILLIAM CARL RUEDIGER, Ph.D..... Dean of the Teachers College  
ALFRED FRANCIS WILLIAM SCHMIDT, A.M..... Professor of German  
CHARLES NOBLE GREGORY, A.M., LL.D.,

Dean of the Department of Law

JOHN PAUL EARNEST, A.M., LL.M..... Professor of Law  
HENRY CRAIG JONES, A.B., LL.B..... Assistant Professor of Law  
WILLIAM CLINE BORDEN, M.D.... Dean of the Department of Medicine  
SHEPHERD IVORY FRANZ, Ph.D..... Professor of Physiology  
JOHN ROLAND WALTON, D.D.S.... Dean of the Department of Dentistry  
HENRY CLAY THOMPSON, D.D.S..... Professor of Operative Dentistry  
HENRY E. KALUSOWSKI, Phar.D.,

Dean of the National College of Pharmacy

DAVID EASTBURN BUCKINGHAM, V.M.D.,

Dean of the College of Veterinary Medicine

## COMMITTEES OF THE PRESIDENT'S COUNCIL

*Catalogue and Other Publications.*—The President, the Secretary, Professors HODGKINS, WILBUR, and SWISHER.

*Admissions.*—Professors WILBUR, MUNROE, and RUEDIGER.

*Schedule.*—Professors HENNING, MECHLIN, and RUEDIGER.

*Library.*—Professors SCHOENFELD, VEDITZ, the Librarian.

*Student Organizations.*—Professors RUEDIGER, HENNING, and JONES.

*Debating.*—Professors VEDITZ; Messrs. C. C. ROSE and W. R. FITCH.

## UNIVERSITY MEMBERS OF FACULTIES AND TEACHING STAFF \*

(Arranged with the exception of the President, in groups, in the order  
of appointment.)

CHARLES HERBERT STOCKTON, LL.D. .... PRESIDENT OF THE UNIVERSITY

### PROFESSORS

J. FORD THOMPSON, M.D. .... Professor of Surgery, Emeritus  
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,

Professor of Obstetrics and Dean Emeritus of the Faculty of Medicine  
THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.,

Professor of Zoology, Emeritus

GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine

HOWARD LINCOLN HODGKINS, Ph.D. .... Dean of the Department of  
Arts and Sciences, Dean of the College of Engineering  
and Mechanic Arts, and Professor of Mathematics

HENRY CRÈCY YARROW, M.D. .... Professor of Dermatology, Emeritus

DANIEL KERFOOT SHUTE, A.B., M.D.,

Professor of Neuro-Anatomy, and Clinical Professor of Ophthalmology

HENRY CLAY THOMPSON, D.D.S. .... Professor of Operative Dentistry

HERMANN SCHOENFELD, Ph.D., LL.D. .... Professor of German

STERLING RUFFIN, M.D. .... Professor of Medicine

CHARLES EDWARD MUNROE, Ph.D., LL.D.,

Dean of the School of Graduate Studies and Professor of Chemistry

GEORGE PERKINS MERRILL, Ph.D., Professor of Geology and Mineralogy

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology

FRANK WIGGLESWORTH CLARK, Sc.D. .... Professor of Mineral Chemistry

HARVEY WASHINGTON WILEY, M.D., Ph.D., LL.D.,

Professor of Agricultural Chemistry (*absent during 1912-13*)

MELVILLE CHURCH, LL.M. .... Professor of the Law of Patents

WILLIAM ALLEN WILBUR, A.M.,

Dean of Columbian College and Professor of English

JOHN WESLEY BOVÉE, M.D. .... Professor of Gynecology

THOMAS ASH CLAYTOR, M.D. .... Clinical Professor of Medicine

AURELIUS RIVES SHANDS, M.D. .... Professor of Orthopedic Surgery

---

\* NOTE—In many instances members of the Teaching Staff give only part time to the University. For the names of the members of the Faculties and Teaching Staff of the Associated Colleges, see Part III of this catalogue.



CHARLES CLINTON SWISHER, Ph.D., LL.D..... Professor of History  
 RANDOLPH BRYAN CARMICHAEL, M.D..... Professor of Dermatology  
 FRANCIS RANDALL HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases

WALTER COLLINS CLEPHANE, LL.M..... Professor of Law  
 MITCHELL CARROLL, Ph.D.... Professor of Greek and the History of Art  
 PAUL BARTSCH, Ph.D..... Professor of Zoology  
 EDWIN CHARLES BRANDENBURG, LL.M..... Professor of Law  
 ARTHUR PETER, LL.B..... Professor of Law  
 WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence

ALBERT LIVINGSTON STAVELY, M.D.... Clinical Professor of Gynecology  
 GEORGE NEELY HENNING, A.M..... Professor of Romance Languages  
 PERCY ASH, S.B., C.E..... Professor of Architecture  
 JOHN PAUL EARNEST, A.M., LL.M..... Professor of Law  
 JOHN ROLAND WALTON, D.D.S..... Dean of the Dental School and

Professor of Prosthetic Dentistry and Orthodontia

WILLIAM ALANSON WHITE, M.D.,

Professor of Psychiatry, and Clinical Professor of Neurology

CHARLES WILLIAM AUGUST VEDITZ, LL.B., Ph.D., Acting Dean of the  
 College of the Political Sciences (1912-13), Professor of Sociology

ALBERT BURNLEY BIBB..... Professor of Architecture  
 GEORGE MILLER STERNBERG, M.D., LL.D.,

Professor of Preventive Medicine

ASAPH HALL, JR., Ph.D..... Professor of Astronomy  
 ARTHUR AUGUSTIN SNYDER, M.D..... Clinical Professor of Surgery  
 ALBERT MANN, Ph.D..... Professor of Botany  
 SHEPHERD IVORY FRANZ, Ph.D..... Professor of Physiology  
 CHARLES SIDNEY SMITH, Ph.D..... Professor of Greek and Latin  
 WENDELL PHILIPS STAFFORD, A.M., LL.D..... Professor of Law  
 WILLIAM CLINE BORDEN, M.D.,

Dean of the Medical Department and Professor of Surgery

JOHN RYDER WELLINGTON, M.D..... Clinical Professor of Surgery  
 CHARLES STANLEY WHITE, M.D.,

Professor of Oral Surgery and Associate in Surgery

DANIEL WEBSTER PRENTISS, M.D..... Professor of Hygiene  
 WILLIAM KENNEDY BUTLER, A.M., M.D.... Professor of Ophthalmology  
 FREDERICK FULLER RUSSELL, M.D.,

Professor of Pathology and Bacteriology

BUCKNER MAGILL RANDOLPH, M.D.,

Professor of Materia Medica and Therapeutics

LUTHER HALSEY REICHELDERFER, M.D..... Clinical Professor of Surgery  
 JAMES DUDLEY MORGAN, A.B., M.D.,

Clinical and Associate Professor of Medicine

LOUIS ANATOLE LA GARDE, M.D..... Professor of Military Surgery  
 WILLIAM CARL REUDIGER, Ph.D.,

Dean of Teachers College, and Professor of Educational Psychology

ALFRED FRANCIS WILLIAM SCHMIDT, A.M.,  
 Librarian and Professor of German  
 WILLIS LUTHER MOORE, Sc.D., LL.D., Professor of Practical Meteorology  
 WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.,  
 Professor of Meteorological Physics  
 MONTGOMERY EARL HIGGINS, M.D..... Professor of Tropical Diseases  
 CHARLES NOBLE GREGORY, A.M., LL.D.,  
 Dean of the Department of Law and Professor of Law  
 GIDEON BROWN MILLER, S.B., M.D.... Clinical Professor of Gynecology  
 MATTHEW KOLLIG, A.B., M.D..... Professor of Anatomy  
 JULIAN MAYO CABELL, M.D..... Clinical Professor of Obstetrics  
 EDWARD ELLIOTT RICHARDSON, M.D., Ph.D.,  
 Acting Professor of Philosophy  
 GEORGE WASHINGTON LITTLEHALES, C.E., Professor of Nautical Science  
 OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology  
 and Associate Professor of Anatomy  
 EDWIN VIVIAN DUNSTAN, C.E..... Professor of Civil Engineering  
 OSCAR ALEXANDER MECHLIN, C.E..... Professor of Civil Engineering

#### ASSOCIATE PROFESSORS

NOBLE PRICE BARNES, M.D., Associate Professor of Materia Medica and  
 Therapeutics, and Clinical Associate in Medicine  
 JOHN ROBERT DE FARGES, D.D.S..... Associate Professor of Dental  
 Metallurgy, Economics, Jurisprudence and Ethics  
 HURON WILLIS LAWSON, S.M., M.D.... Associate Professor of Obstetrics  
 and Associate Obstetrician in Chief to  
 the University Hospital and Dispensary  
 CHARLES TURK BASSETT, D.D.S.,  
 Associate Professor in Charge of Dental Infirmary  
 ALLEN SCOTT WOLFE, D.D.S.,  
 Associate Professor of Crown and Bridge Work  
 CADMUS LINDEN ODOR, D.D.S.,  
 Associate Professor of Operative Technics  
 WILLIAM FRANCIS LAWRENCE, D.D.S.,  
 Associate Professor of Prosthetic Technics  
 ARTHUR BARTON CRANE, D.D.S.... Associate Professor of Oral Surgery  
 D. DE WITT BEEKMAN, D.D.S.,  
 Associate Professor of Materia Medica and Therapeutics  
 FRANK ADELBERT HORNADAY, S.B., M.D.,  
 Associate Professor of Chemistry

#### ASSOCIATES

JOHN BENJAMIN NICHOLS, M.D..... Associate in Medicine and Dietetics  
 HARRY HAMPTON DONNALLY, A.M., M.D.,  
 Associate in Medicine and Clinical Associate in Pediatrics  
 WILLIAM FRANCIS MATTINGLY SOWERS, A.B., M.D., Associate in Surgery

### ASSISTANT PROFESSORS

## LECTURERS AND INSTRUCTORS

EDWARD GRANT SEIBERT, M.D.,  
Instructor in Laryngology and Ophthalmology  
OSCAR PHELPS AUSTIN.....Lecturer on Commercial Geography  
FREDERICK EUGENE FOWLE, JR., S.B.....Lecturer on Astro-Physics  
WILLARD STANTON SMALL, Ph.D.....Lecturer on Education  
STEPHEN ELLIOTT KRAMER, S.B., A.M., Lecturer on Education (1912-13)

JOHN LEE COULTER, A.M., Lecturer on Agricultural Economics (1912-13)  
 EDWIN WILEY, Ph.D..... Lecturer on English  
 JESSE E. POPE, Ph.D.... Lecturer on Agricultural Economics (1912-13)  
 WALTER HIBBARD MERRILL, M.D.... Instructor in Electro-Therapeutics  
 OSCAR ADDISON MACK McKIMMIE, M.D.,

Instructor in Laryngology and Otology  
 HOBART SOUTHWORTH DYE, M.D.,

Instructor in Laryngology and Otology  
 TRUMAN ABBE, M.D..... Instructor in Genito-Urinary Surgery

JOSEPH LAWN THOMPSON, M.D..... Instructor in Medicine  
 ALFRED GEISES BUHRMAN..... Clerk of the Moot Court

GEORGE MORTON CHURCHILL, A.M.... Instructor in History (1912-13)  
 VIRGIL B. JACKSON, M.D..... Instructor in Gynecology

EDMUND THOMAS MURDAUGH FRANKLIN, M.D.... Instructor in Surgery  
 WILLIAM J. FRENCH, M.D..... Instructor in Pediatrics

ARTHUR LEROY HUNT, M.D..... Instructor in Anaesthesia  
 CHARLES WILBUR HYDE, M.D., Instructor in Medicine and Anaesthesia

JOHN WINSLOW TAYLOR, D.D.S..... Instructor in Prosthetic Technics  
 and Demonstrator in the Dental Infirmary

ADAM KEMBLE, M.D..... Instructor in Genito-Urinary Surgery  
 HOMER GIFFORD FULLER, M.D.,

Instructor in Genito-Urinary Surgery and Venereal Diseases  
 CHARLES GARDNER SHOEMAKER, D.D.S.,

Instructor in Operative Technics  
 HENRY CISSEL YOUNG, D.D.S.... Instructor in Prosthetic Technics and

Demonstrator in the Dental Infirmary  
 HERBERT CORNWELL HOPKINS, D.D.S..... Lecturer on Orthodontia

HAYNER HASKELL GORDON, Ph.D., Instructor in Mechanical Engineering  
 ROBERT WILBUR MORSE, S.B.... Instructor in Mechanical Engineering

CLINE CHIPMAN, M.D..... Instructor in Anaesthesia  
 GEORGE HENRY SCHWINN, M.D., Instructor in Psychiatry and Neurology

BENJAMIN RUSH LOGIE, M.D..... Instructor in Neurology  
 MARK RITTENHOUSE WOODWARD, E.E.,

Instructor in Electrical Engineering  
 ALBERT PERKINS TIBBETS, M.D..... Instructor in Anatomy

COURSEN BAXTER CONKLIN, M.D..... Instructor in Medicine  
 ALEXANDER YELVERTON PEYTON GARNETT, M.D.,

Instructor in Obstetrics  
 HARRY HYLAND KERR, M.D..... Instructor in Operative Surgery

HARRY GRANT HODGKINS, A.B..... Instructor in Mathematics  
 WILLIAM JOHNSTON MALLORY, M.D... Instructor in Medicine

CAESARE LOUIS CONSTANTINI, D.D. S.,

In Charge of Clinical Instruction in Dentistry  
 ARTHUR DURDAN WEAKLEY, D.D.S.... Clinical Instructor in Dentistry

THOMAS LOCKE RUST, D.D.S..... Clinical Instructor in Dentistry  
 GEORGE BERTRAM ROFER MACDONALD, D.D.S.,

Clinical Instructor in Dentistry



WILLIAM CARL KILLINGER, D.D.S....Clinical Instructor in Orthodontia  
 MARK FLORUS FINLEY, D.D.S.....Clinical Instructor in Orthodontia  
 ALEXANDER DUNNINGTON COBEY, D.D.S.,

Clinical Instructor in Non-Cohesive Gold

GEORGE MILLER SHARP, D.D.S.....Lecturer on Oral Prophylaxis  
 Z. WILBUR ALDERMAN, D.D.S.,

Clinical Instructor in Electro-Therapeutics

ROBERT EDWIN LAYTON, D.D.S....Clinical Instructor in Dentistry

JULIA THECKLA MACMILLAN, M.S.....Instructor in Zoology

WILLIAM WRIGHT FRASER, A.B., B.L.....Lecturer in Mathematics

ALTON LEWIN KIBLER, Ph.D..Instructor in Chemistry

CHARLES EDWARD VAN OSTRAND, S.M.....Lecturer on Mechanics

HARVEY LINCOLN CURTIS, Ph.D.....Lecturer on Physics

ELIJAH WHITE TITUS, Phar.D., M.D.,

Instructor in Physiology, Pharmacology, and Obstetrics

FRANCIS MERRIMAN BARNES, JR., M.D.,

Instructor in Psychiatry and Neurology

RALPH MICHELL LeCOMTE, M.D.,

Instructor in Pathology and Bacteriology

CARL LAWRENCE DAVIS, M.D.....Instructor in Anatomy

WILLIAM CABELL VAN VLECK, A.B., LL.B.....Instructor in Law

PHILIP ROGERS HOOTON.....Instructor in Architecture

MARIETTA STOCKARD, Lecturer on the Teaching of Children's Literature

DANIEL LE RAY BORDEN, M.D....Instructor in Surgery and Gynecology

FRANK RAY RUTTER, Ph.D..Lecturer on Commercial Policies (1912-13)

WALTER DUVAL WEBB, M.D..Instructor in Surgery

ALBERT ELWOOD PAGAN, M.D.....Instructor in Gynecology

ARTHUR DEERIN CALL, A.M. ....Lecturer on Elementary Education

JAMES WALTER BERNHARD, D.D.S. Instructor in Crown and Bridge Work

GEORGE TRAVER HARRINGTON, B.S. in Agri., B S. in Chem.,

Instructor in Botany

ALBERTUS HUTCHINSON BALDWIN....Lecturer on Commerce (1912-13)

#### ASSISTANTS AND DEMONSTRATORS

MARION EDWYN HARRISON, D.D.S.,

Demonstrator in the Dental Infirmary

CHARLES CLARK AMMERMAN, M.D.,

Assistant in Ophthalmology to the Dispensary

MOSES WALTON HENDRY, A.B., LL.B.....Assistant in Greek

EDWIN HENRY INGERSOLL, S.B.....Assistant in Chemistry

WALTER EDGAR HANCOCK, A.B....Assistant in Spanish

HAROLD KEATS, A.B.....Assistant in History

REBECCA SHERMAN ASHLEY.....Assistant in Archaeology

HENRY ALBERT LEPPER.....Student Assistant in Chemistry

JETER CARROLL BRADLEY,

Student Assistant in Bacteriology and Pathology

TAYLOR CHASE.....Student Assistant in Physiology and Pharmacology  
SIDNEY CHARLES COUSINS,

Student Assistant in Anatomy, Histology, and Embryology

GEORGE WASHINGTON PHILLIPS.....Student Assistant in Chemistry

RAYMOND CORNWELL SIMPSON.....Student Assistant in Chemistry

GRIFFIN GUY FRAZIER.....Student Assistant in Chemistry

### EDUCATIONAL ORGANIZATION

The University comprises:

#### THE DEPARTMENT OF ARTS AND SCIENCES.

The School of Graduate Studies.

Columbian College.

The College of Engineering and Mechanic Arts.

The Teachers College.

#### THE PROFESSIONAL DEPARTMENTS.

The Department of Law.

The Department of Medicine.

The Department of Dentistry.

#### THE ASSOCIATED COLLEGES.

National College of Pharmacy.

The College of Veterinary Medicine.

### ANNUAL COMMENCEMENT

The Annual Commencement is held on the Wednesday following the Wednesday nearest the first day of June. Students who have satisfied the requirements for degrees subsequent to the June Commencement may be awarded such degrees privately in October or at the Winter Convocation on February 22.

### THE UNIVERSITY LIBRARY

The University Library comprises the Library of the Department of Arts and Sciences, the Law Library, and the Medical Library. It contains 46,663 volumes.

In addition to its general collections the Library of the Department of Arts and Sciences contains the library of the late Professor Richard Heinzel, of the University of Vienna, containing 7200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7900 books and pamphlets in Greek and Roman literature, archaeology, and history; the Mount Vernon Alcove contain-

ing 4000 volumes in political history, international law, and the social sciences; and the divisional collections in engineering and mechanic arts and in education. It is open from 9 a.m. to 6.40 p.m.

The Law Library, containing 6000 volumes, is open from 9 a.m. to 10 p.m.

The Medical Library, containing 3000 volumes, is open from 9 a.m. to 10.30 p.m.

#### PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

*"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:*

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."





**PART II**  
**DEPARTMENTS OF THE UNIVERSITY**



# DEPARTMENT OF ART AND SCIENCES

## FACULTY

CHARLES HERBERT STOCKTON, LL.D.... PRESIDENT OF THE UNIVERSITY  
HOWARD LINCOLN HODGKINS, Ph.D.,.... Dean, Dean of the College of

Engineering and Mechanic Arts, and Professor of Mathematics

\*THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.,

Professor of Zoology, Emeritus

HERMANN SCHOENFELD, Ph.D., LL.D..... Professor of German

CHARLES EDWARD MUNROE, Ph.D., LL.D.,

Dean of the School of Graduate Studies and Professor of Chemistry

\*GEORGE PERKINS MERRILL, Ph.D.,

Professor of Geology and Mineralogy

\*FRANK WIGGLESWORTH CLARKE, Sc.D... Professor of Mineral Chemistry

\*HARVEY WASHINGTON WILEY, M.D., Ph.D., LL.D.,

Professor of Agricultural Chemistry (*absent during 1912-13*)

WILLIAM ALLEN WILBUR, A.M.,

Dean of Columbian College and Professor of English

CHARLES CLINTON SWISHER, Ph.D., LL.D... Professor of History

\*MITCHELL CARROLL, Ph.D., Professor of Greek and the History of Art

\*PAUL BARTSCH, Ph.D..... Professor of Zoology

GEORGE NEELY HENNING, A.M..... Professor of Romance Languages

PERCY ASH, S.B., C.E..... Professor of Architecture

CHARLES WILLIAM AUGUST VEDITZ, LL.B., Ph.D.... Acting Dean of the

College of the Political Sciences (1912-13) and Professor of Sociology

ALBERT BURNLEY BIBB... Professor of Architecture

\*GEORGE MILLER STERNBERG, M.D., LL.D.,

Professor of Preventive Medicine

\*ASAPH HALL, JR., Ph.D..... Professor of Astronomy

\*ALBERT MANN, Ph.D..... Professor of Botany

CHARLES SIDNEY SMITH, Ph.D..... Professor of Greek and Latin

WILLIAM CARL RUEDIGER, Ph.D.,

Dean of Teachers College and Professor of Educational Psychology

ALFRED FRANCIS WILLIAM SCHMIDT, A.M.... Professor of German

\*WILLIS LUTHER MOORE, Sc.D., LL.D.,

Professor of Practical Meteorology

\*WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.,

Professor of Meteorological Physics

CHARLES NOBLE GREGORY, A.M., LL.D..... Professor of Law

---

\* These professors are specialists who give only part of their time to the University.

EDWARD ELLIOTT RICHARDSON, M.D., Ph.D.,

Acting Professor of Philosophy

\*GEORGE WASHINGTON LITTLEHALES, C.E.,

Professor of Nautical Science

EDWIN VIVIAN DUNSTAN, C.E. . . . . Professor of Civil Engineering

OSCAR ALEXANDER MECHLIN, C.E. . . . . Professor of Civil Engineering

NEVIL MONROE HOPKINS, Ph.D. . . . . Assistant Professor of Chemistry

EDWIN ALLSTON HILL, Ph.D. . . . . Assistant Professor of Chemistry

THOMAS MALCOLM PRICE, Ph.D. . . . . Assistant Professor of Chemistry

RAY SMITH BASSLER, Ph.D. . . . . Assistant Professor of Geology

PERLEY GILMAN NUTTING, Ph.D. . . . . Assistant Professor of Physics

JOHN WILMER LATIMER, LL.B. . . . . Assistant Professor of Law (1912-13)

OTIS DOW SWETT, LL.M., S.M. . . . . Assistant Professor of Chemistry

CHARLES WARD MORTIMER, S.B., M.E.,

Assistant Professor of Electrical Engineering

FRANK CHARLES STARR, S.B., Assistant Professor of Civil Engineering

BLAINE FREE MOORE, A.M. . . . . Assistant Professor of Political Science

HIRAM COLVER McNEIL, Ph.D.,

Assistant Professor of Physical Chemistry

ROBERT RUSS KERN, A.B.,

Assistant Professor of Economics and Sociology

LEVI RUSSELL ALDEN, A.M. . . . . Assistant Professor of History

LESLIE CLEVELAND McNEMAR, A.B.,

Assistant Professor of International Law (1912-13)

ALBERT LEWIS HARRIS, B.S. in Arch.,

Assistant Professor of Architecture

RICHARD COBB, A.B. . . . . Assistant Professor of English

OSCAR PHELPS AUSTIN. . . . . Lecturer on Commercial Geography

FREDERICK EUGENE FOWLE, JR., S.B. . . . . Lecturer on Astro-Physics

WILLIAM STANTON SMALL, Ph.D. . . . . Lecturer on Education

STEPHEN ELLIOTT KRAMER, S.B., A.M.,

Lecturer on Education (1912-13)

JOHN LEE COULTER, A.M., Lecturer on Agricultural Economics (1912-13)

EDWIN WILEY, Ph.D. . . . . Lecturer on English

JESSE E. POPE, Ph.D., Lecturer on Agricultural Economics (1912-13)

GEORGE MORTON CHURCHILL, A.M. . . . . Instructor in History (1912-13)

HAYNER HASKELL GORDON, Ph.D.,

Instructor in Mechanical Engineering

ROBERT WILBUR MORSE, S.B. . . . . Instructor in Mechanical Engineering

MARK RITTENHOUSE WOODWARD, E.E.,

Instructor in Electrical Engineering

HARRY GRANT HODGKINS, A.B. . . . . Instructor in Mathematics

JULIA THECKLA MACMILLAN, S.M. . . . . Instructor in Zoology

WILLIAM WRIGHT FRASER, A.B., B.L. . . . . Lecturer in Mathematics

ALTON LEWIN KIBLER, Ph.D. . . . . Instructor in Chemistry

---

\* These professors are specialists who give only part of their time to the University.



CHARLES EDWIN VAN OSTRAND, S.M.....	Lecturer on Mechanics
HARVEY LINCOLN CURTIS, Ph.D.....	Lecturer on Physics
PHILIP ROGERS HOOTON .....	Instructor in Architecture
MARIETTA STOCKARD..	Lecturer on the Teaching of Children's Literature
FRANK RAY RUTTER, Ph.D.,	Lecturer on Commercial Policies (1912-13)
ARTHUR DEERIN CALL, A.M. ....	Lecturer on Elementary Education
GEORGE TRAVER HARRINGTON, B.S. in Agr., B.S. in Chem.,	
	Instructor in Botany
ALBERTUS HUTCHINSON BALDWIN ....	Lecturer on Commerce (1912-13)

#### Faculty of the School of Graduate Studies

President Stockton, Dean Munroe, Professors Gill, Hodgkins, Schoenfeld, Merrill, Clarke, Wiley, Wilbur, Swisher, Carroll, Bartsch, Henning, Ash, Sternberg, Hall, Mann, Smith, Price, Ruediger, Schmidt, Moore, Humphreys, Gregory, Richardson, Littlehales, Dunstan, Mechlin, Assistant Professors Hopkins, Hill, Bassler, Nutting, Mortimer, McNeil, Kern, Alden; Messrs. Wiley, Van Ostrand, Curtis.

#### Faculty of Columbian College

President Stockton, Dean Wilbur, Professors Hodgkins, Schoenfeld, Munroe, Merrill, Swisher, Bartsch, Henning, Smith, Schmidt, Richardson; Assistant Professors Bassler, Swett, Moore, Kern, Cobb; Mr. Woodward, Miss Macmillan, Mr. Hancock, Mr. Harrington.

#### Faculty of College of Engineering and Mechanic Arts

President Stockton, Dean Hodgkins, Professors Schoenfeld, Munroe, Merrill, Wilbur, Henning, Schmidt, Ash, Bibb, Dunstan, Mechlin; Assistant Professors Swett, Starr, Mortimer, Harris; Messrs. Gordon, Morse, Woodward.

#### Faculty of Teachers College

President Stockton, Dean Ruediger, Professors Hodgkins, Schoenfeld, Munroe, Wilbur, Swisher, Bartsch, Henning, Smith, Schmidt, Richardson; Assistant Professors Moore, Kern, Cobb; Messrs. Small, Call; Miss Stockard.

## SCHOOL OF GRADUATE STUDIES

### HIGHER DEGREES

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (S.M.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

## ADMISSION

Candidates for admission to courses for higher degrees must make application to the Dean of the School of Graduate Studies on application blanks, which may be obtained of him or of the Secretary of the University. Candidates must present the diplomas they hold, or certificates that they have received such diplomas, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

## DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the course of study pursued must have been such as to qualify the candidates for pursuing the subjects chosen for the Master's or other higher degree sought. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated University subjects approved by the Faculty upon recommendation of the professors in charge and to present a satisfactory thesis. Only one of the minor topics may be selected from the University subject which includes the major topic. Work for which this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete three full courses of studies, of two or three hours each, distributed among three University subjects, not more than six hours of which shall be given to any one subject. These subjects must have the approval of the Faculty on the recommendation of the professors in charge. The candidate must also present a thesis in the field to which the major subject belongs.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done in satisfaction of the requirements for the Bachelor's degree shall be counted again for a higher degree.

## HIGHER DEGREES IN ENGINEERING

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study

such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued, and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

#### DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects, has engaged in original research under university auspices for a period of not less than three years, has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for this degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for his graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies, one of which minors may be in the subject which includes the major topic—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each



minor topic during at least one year. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a thesis upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

#### EXAMINATIONS

Candidates must pass written examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final written examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to warrant such an examination being taken. If a candidate has satisfactorily passed his final written examination, he may be permitted to complete his thesis away from the University.

#### DEFENSE OF THE THESIS

Before a candidate can be recommended to the Board of Trustees for the Doctor of Philosophy degree, he must have successfully defended his thesis in public before a Board of Experts not officially connected with the University. Before the candidate can be permitted to undertake the defense of his thesis, the thesis must have been favorably reported on and recommended for defense by the professor having supervision over the candidate's major topic, and by a co-referee appointed from the Faculty of Graduate Studies.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Agriculture, Applied Mathematics, Architecture, Astronomy, Astrophysics, Bacteriology, Botany, Chemistry, Classical Archaeology, Economics, Education, Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology and Embryology, History, History of Art, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Pathology, Philosophy, Physics, Physiology and Pharmacology, Political Sciences, Preventive Medicine, Psychology, Romance Language and Literature, Semitic Languages and Literature, Sociology, Zoology.

#### REGULATIONS REGARDING THESES

Theses must be presented to the Dean not later than May 1 for graduation in June. They must be typewritten on official thesis paper, which



may be obtained from the Treasurer of the University. The thesis will be presented by the Dean to the Chairman of the Committee on the candidate and the co-referee appointed from and by the Faculty for examination as to its merits when, on a favorable report by them, it may be defended in the Public Disputation. After their acceptance, theses, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate shall arrange, to the satisfaction of the Faculty, to print his thesis under the supervision of the professor in charge of his major subject, within one year after the degree is granted, and he shall present one hundred copies to the University, to be distributed among institutions of learning.

#### DOCTORATE DISPUTATIONS

The Twenty-second Doctorate Disputation was held publicly in University Hall, February 10, 1913. The thesis that was successfully defended, the candidate and the members of the board of experts were as follows:

*Thesis.*—Treeshrews: An Account of the Mammalian Family Tupaiidae.

By MARCUS WARD LYON, JR., Ph.B., 1897, S.M., Brown University; 1900; and M.D., 1902, The Columbian University. Before Dr. C. HART MERRIAM, Biologist, Harriman Foundation; Dr. LEONHARD STEJNEGER, Head Curator of Biology, U. S. National Museum; Dr. T. S. PALMER, Assistant Chief, U. S. Biological Survey. Professor PAUL BARTSCH, Ph.D., presiding.

### THE COLLEGES

The College session of 1913-14 begins Wednesday, September 24, 1913. The Colleges are open to men and women.

#### ADMISSION

Every applicant for admission is required to present a testimonial of good character and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

*The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." For prescribed studies see the specifications of each college.*

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

#### ENTRANCE EXAMINATIONS

The regular examinations for admission are held in May.

The following is the schedule for 1913:

##### Monday, May 26, 1913

Elementary Latin.....	9.00-11.00
Plane Geometry.....	11.00- 1.00
Physics.....	2.00- 4.00
Greek.....	2.00- 5.00

##### Tuesday, May 27

Elementary Algebra.....	9.00-11.00
Elementary French.....	11.00- 1.00
Elementary German.....	2.00- 4.00
Ancient History.....	4.00- 6.00

##### Wednesday, May 28

Plane Trigonometry.....	9.00-11.00
Advanced French, Advanced German.....	11.00- 1.00
English.....	2.00- 5.00

##### Thursday, May 29

Advanced Algebra.....	9.00-11.00
Solid Geometry.....	11.00- 1.00
Chemistry; Advanced Latin.....	2.00- 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on nine and one-half units. These units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two and one-half units), and one other language (two units); the remaining two units may be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

## DEFINITION OF REQUIREMENTS

## English

*(Three units)*

The requirements in English are those recommended by the Conference on Uniform Entrance Requirements in English. These recommendations are as follows:

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

*English Grammar and Composition*

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school, and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description, and easy exposition and argument based upon simple outlines. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

*Literature*

The second object is sought by means of two lists of books, headed respectively, *reading* and *study*, from which may be framed a progressive course in literature covering four years. In connection with both lists the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages, both in verse and in prose. As an aid to literary appreciation he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

1. *Reading*.—The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for read-

ing are arranged in the following groups, from which at least ten units\* are to be selected, two from each group:

a. The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings; and Daniel; together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; the Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; Virgil's *Æneid*. The Odyssey, Iliad, and *Æneid* should be read in English translations of recognized literary excellence.

For any unit of this group a unit from any other group may be substituted.

b. Shakespeare's Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Caesar.

c. Defoe's Robinson Crusoe, Part I; Goldsmith's Vicar of Wakefield; either Scott's Ivanhoe or Scott's Quentin Durward; Hawthorne's House of the Seven Gables; either Dickens' David Copperfield or Dickens' Tale of Two Cities; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; George Eliot's Silas Marner; Stevenson's Treasure Island.

d. Bunyan's Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography (condensed); Irving's Sketch Book; Macaulay's Essays on Lord Clive and Warren Hastings; Thackeray's English Humourists; Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's Oregon Trail; either Thoreau's Walden or Huxley's Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's Inland Voyage and Travels with a Donkey.

e. Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village; Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal; Scott's Lady of the Lake; Byron's Childe Harold, Canto IV, and Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Poe's Raven, Longfellow's Courtship of Miles Standish, and Whittier's Snow Bound; Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City.

2. *Study*.—This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress

---

\* Each unit is set off by semicolons.



laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. For this close reading are provided a play, a group of poems, an oration, and an essay, as follows:

Shakespeare's *Macbeth*; Milton's *L'Allegro*, *Il Penseroso*, and *Comus*; either Burke's *Speech on Conciliation with America* or both Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*; either Macaulay's *Life of Johnson* or Carlyle's *Essay on Burns*.

### *Examination*

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The first part of the examination will be upon ten units chosen in accordance with the plan described earlier, from the lists headed *reading*; and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development, and other qualities of style and treatment as may be fairly expected of boys and girls. In grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *study*. The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for *study*, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

### Latin

#### *Elementary (two units)*

a. I. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure

of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

II. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Caesar.

b. Caesar: Any four books of the Gallic War, preferably the first four.

*Advanced (two units)*

a. Cicero: Any six orations from the following list, but preferably the first six mentioned. The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of *Æneid*.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

Greek

*Elementary (two units)*

a. I. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

II. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions. The examination in grammar and prose composition will be based on the first two books of Xenophon's *Anabasis*.

b. Xenophon: The first four books of the *Anabasis*.

*Advanced (one unit)*

a. Homer: The first three books of the *Iliad* (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's *Anabasis*.

French

*Elementary (two units)*

Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of five periods per week.

*Advanced (two units)*

Candidates in advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

**Spanish***(Two units)*

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.

**German***Elementary (two units)*

Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

*Advanced (two units)*

Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

**History**

In this subject special importance is attached to preparation in geography.

*Ancient (one unit)*

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's or West's History of the Roman People.

*Mediaeval and Modern European History (one unit)*

As much as is contained in Myer's History of Mediaeval and Modern Europe.

*English History (one unit)*

As much as is contained in Larned's or Cheyney's History of England

*American History with the Elements of Civil Government (one unit)*

As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

**Mathematics***Elementary Algebra (one and one-half units)*

I. Algebra to Quadratics: The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

II. Quadratics, etc.: Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

*Advanced Algebra (one-half unit)*

I. Progressions, etc.: The progressions, the elementary treatment of permutations and combinations, and the use of four and five place tables and logarithms.

II. Series, etc.: Undetermined coefficients, the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents, and the theory of logarithms.

III. Theory of equations: Determinants coefficients, the elementary treatment of, including Horner's method for, solving numerical equations.



*Plane Geometry (one unit)*

General text propositions, including the solution of simple original exercises and numerical problems.

*Solid Geometry (one-half unit)*

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

*Plane Trigonometry (one-half unit)*

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

**Physics***(One unit)*

It is recommended that the candidate's preparation should include:

- a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

**Chemistry***(One unit)*

The candidate's preparation in chemistry should include:

- a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one modern text-book.

*Requirements.*—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur, phosphorus, silicon, potassium, sodium, calcium, magnesium, zinc, copper, mercury, silver, aluminum, lead, tin, iron, manganese, chromium.*

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

#### Additional Subjects

Certificates will be accepted in botany, zoology, physiology, physiography, political economy, drawing, music, and other accredited subjects in secondary schools.

#### *Manual-training High School Subjects*

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, may be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

#### *Business High School Subjects*

Commercial subjects in business high schools or schools of similar grade, when duly certified, may be credited as follows:

Accounting and Finance. (One unit.)

Bookkeeping. (Two units.)

Business Organization. (One unit.)

Commercial Law. (One unit.)

Government and Industrial Problems. (One-half unit.)

Commercial History. (One-half unit.)

Commercial and Physical Geography. (One-half unit.)

## ADMISSION TO ADVANCED STANDING

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

## SPECIAL STUDENTS

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue. Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance.

## SCHOLARSHIPS AND PRIZES

Applications for scholarships should be filed with the Dean of the College in which the student is registered not later than September fifteenth. All Scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked. All designations to scholarships are awarded by the President's Council on the recommendation of a Dean.

## Scholarships for Competition

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance examinations. Holders of these scholarships are expected to pursue a regular course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

*Kendall Scholarship.*—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

*University Scholarships.*—The University offers also six scholarships, to be awarded annually to members of the graduating classes of any of the Washington High Schools. These scholarships continue throughout the undergraduate course, and students holding them pay only the matriculation, library, laboratory, and graduation fees.

## Scholarships for Assignment

*Davis Scholarship.*—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

*Mary Lowell Stone Scholarship.*—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

*Maria M. Carter Scholarship.*—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

*Farnham Scholarship.*—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

*Withington Scholarship.*—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

*Walker Scholarship.*—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an annual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

*Morehouse Scholarship.*—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

*Henry Harding Carter Scholarships.*—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consists of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

*Admiral Powell Scholarships.*—The Admiral Powell Scholarships were founded by Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to



come up for examination as warrant officers in the Engineer Department of the Navy, to warrant officers who are preparing for examination for appointment as Ensign, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics.

	HOURS
Navigation and Nautical Astronomy.....	6
Algebra and Geometry.....	3
Trigonometry.....	1½
Mechanical and Machine Drawing.....	4
English.....	3
French.....	3
German.....	3
Spanish.....	3
International Law.....	1
Commercial Geography.....	1
Admiralty Law.....	½
Boilers and Power Plants.....	3
Measurement of Power.....	2
Electricity.....	3
Electrical Engineering.....	6

*Ministerial Aid.*—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity in the regular courses of Columbian College, preparing for the ministry and not yet ordained. Any student receiving Ministerial Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and of not more than four hours in any one week.

*University Aid.*—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be given to undergraduate students in regular courses in the Department of Arts and Sciences, financially dependent on parents, who are residents of the District of Columbia or its immediate vicinity and whose circumstances warrant pecuniary assistance. Any student receiving University Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and for not more than four hours in any one week.

*Columbian Women Loan Fund.*—The Columbian Women have established a fund from which money is loaned to women students, preference being given to women who have already begun work in the University and who need assistance in continuing it. The administration of the fund remains with the Columbian Women.

## PRIZES

(Only candidates for degrees may compete for these prizes.)

*Staughton and Elton Prizes.*—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

*Ruggles Prizes.*—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

*Davis Prizes.*—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

*Daughters of the American Revolution Prizes.*—These prizes founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediaeval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

*The Thomas F. Walsh Prize.*—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the regular classes of Mediaeval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

*E. K. Cutter Prize.*—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

*Willie E. Fitch Prize.*—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

*The Gardiner G. Hubbard Memorial Prize.*—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that member of the graduating class who has during four years main-

tained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

*Muth Prize.*—Geo. F. Muth and Company offer a set of drawing instruments to the student taking Advanced Mechanical Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

*Colonial History Prize.*—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

*James Macbride Sterrett, Jr., Prize.*—Founded by Professor James Macbride Sterrett in memory of his son, consists of a gold medal annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

*The Chi Omega Prize in Philosophy.*—An annual prize of fifteen dollars is offered by the Phi Alpha Chapter of the Chi Omega Fraternity for the best essay on a philosophical subject to be announced at the close of the preceding academic year by the Committee in charge. Essays must meet the requirements defined by the Committee and be submitted on or before April 1. Only women students who are members of a senior class in the Department of Arts and Sciences, and who have previously completed the courses in General Psychology, Logic, and the History of Philosophy, are eligible to compete.

*Chi Omega Prize in Sociology.*—An annual prize of \$15.00 is offered by the Chi Omega Fraternity for the best essay on a sociological subject. All women students registered in the courses in Sociology are eligible to compete for this prize. The subjects of the essays are to be chosen by the competitors with the approval of the Professor of Sociology. The prize will be awarded by a committee of three, consisting of the Professor of Sociology, the Dean of Columbian College, and a third member selected by these two. Essays in competition for this prize must be submitted to the Professor of Sociology on or before May 1st.

#### Davis Prize Speaking

The Davis Prize Speaking is held on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of five dollars, of ten dollars, and of fifteen dollars annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking

contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of Columbian College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the Columbian College.

### RELIGIOUS WORK

The student movement in Association work is represented by the Young Men's Christian Association of the University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association.

### College Chapel

Chapel Services are held at 12.15 p.m., every week day, except Saturday, throughout the academic year.

The Deans of the Colleges will confer with students as they may desire on questions concerning their welfare and will co-operate with them in all ways to make the college life one of personal helpfulness.

### FEEES

1. Matriculation fee (payable once)..... \$5
2. Annual library fee..... 2
3. *Tuition fee per annum for each hour per week* of undergraduate courses leading to the degrees of A.B. and S.B..... 10  
The maximum fee charged in any one year is \$150.
4. Tuition fee per annum for graduate courses leading to the degrees of A.M., S.M., C.E., E.E., M.E., and Ph.D..... 150  
Each separate topic..... 50  
Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of \$50 per annum for each topic pursued by them.
5. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, except for courses which do not begin with the terms..... 2
6. Laboratory courses:  
Material fees:  
Experimental Psychology..... 2  
Geology 1, Zoology, Botany, Chemistry 28, each..... 5  
Chemistry 2, 3, and 7; Electrical Engineering; Physics, each 10



Chemistry 4 (Assaying).....	20
Chemistry, except 2, 3, 4, 7, and 28, each.....	25
Deposits to cover breakage of apparatus issued, the amount paid in excess of breakage to be returned:	
Chemistry, 2, 3, 7, and 28, each.....	10
Chemistry, except 2, 3, 4, 7, and 28, each.....	25
7. Fee for graduation.....	10
8. Tuition fee for the following special course, not taken by candidates for a degree:	
Chemistry 4 (Assaying).....	40
9. In determining tuition fees, three hours of laboratory work in Chemistry, and two hours of laboratory work in other subjects count as one hour.	
10. Fee for certificates under the seal of the University.....	2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

#### PAYMENT OF FEES

Matriculation, library, and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. All fees are payable at the office of the Treasurer of the University, 2024 G Street.

#### BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,  
The George Washington University,  
2023 G Street, Washington, D. C.

### COLUMBIAN COLLEGE

#### ADMISSION

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements (p. 49) of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen*

*units of the entrance requirement must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish. 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

For admission to advanced standing or as special students, see p. 59.

#### REQUIREMENTS FOR DEGREES

The undergraduate degrees offered by Columbian College are Bachelor of Arts, Bachelor of Science in Chemistry, and Bachelor of Science in Medicine. To be recommended for any one of these degrees, the student must be registered for at least one academic year in Columbian College; must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses. An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year. No time limit for the course is prescribed and the degree is given when the total of prescribed and elective studies is completed.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the student shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

#### FOR THE DEGREE OF BACHELOR OF ARTS

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study including a group of prescribed subjects, and aggregating at least sixty "hours."

There are four groups of prescribed subjects for the first two years of the college course. Every candidate for the degree of Bachelor of Arts selects one of these groups of prescribed subjects, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years are elective, subject only to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the four groups of prescribed subjects is a provision alike for the diversity in the subjects of the secondary school curriculum

leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would constitute needed preparation for the Department of Law, or further study in the political sciences.

(NOTE)—Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

#### Group I

	HOURS
English.....	6
History.....	3
Languages*.....	9
Latin.....	6
Mathematics.....	3
Psychology and Logic.....	3
Electives.....	30

#### Group II

	HOURS
English.....	6
French.....	3
German.....	6
History.....	6
Mathematics or Science.....	3
Psychology and Logic.....	3
Romance Language.....	3
Electives.....	30

#### Group III

	HOURS
English.....	3
History.....	3
Mathematics.....	6
Modern Languages.....	6
Psychology and Logic.....	3
Science.....	9
Electives.....	30

\* To be elected from Greek, French, German.

**Group IV**

	HOURS
Economics.....	3
English.....	3
History.....	6
Mathematics.....	3
Modern Languages or Latin.....	6
Political Science.....	3
Psychology and Logic.....	3
Science.....	3
Electives.....	30

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY****Freshman Year**

	HOURS
Chemistry, 1, 2.....	5
English, 1 or 2.....	3
Mathematics, 3 or 6.....	3
French or German.....	3
Geology, 1.....	2

**Sophomore Year**

	HOURS
Chemistry, 3, 20.....	5
French or German.....	3
Mathematics, 9 or 12.....	3
Physics, 1, 2.....	5

**Junior Year**

	HOURS
Chemistry, 21, (4), 23.....	6
French or German.....	3
Mathematics, 20 or 21.....	3
Electrical Engineering, 7.....	3

**Senior Year**

	HOURS
Chemistry, 6, 24, 25, 27.....	9
Economics or History.....	3
Geology, 2.....	2

**COMBINATION COURSES****Six-year course for the degree of Bachelor of Arts and Bachelor of Laws**

Regular students in this course will complete three years of work aggregating forty-five hours in Columbian College, including one of the four groups of prescribed subjects, and will complete in the Department of Law the three-year course for the degree of Bachelor of Laws. On the completion of the prescribed forty-five hours of work in Columbian



College and the first year of the regular course in Law, the student will receive the degree of Bachelor of Arts.

**Seven-year course for the degree of Bachelor of Arts and Doctor of Medicine**

Regular students in this course will complete at least forty-eight hours as prescribed in Columbian College, and the four-year course in the Department of Medicine. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The forty-eight hours of prescribed subjects in Columbian College are as follows:

Biological Sciences:	HOURS
Zoology, 1 and 2.....	6
Botany, 1, 2.....	3
Chemistry, 1, 3, 23.....	7
English, 1 or 2.....	3
French or Spanish.....	6
German.....	6
History.....	3
Mathematics, 3 or 6.....	3
Physics, 1 or 3, and 2.....	5
Psychology and Logic.....	3
Economics, History, or English.....	3
Total.....	48

**Six-year course for the degrees of Bachelor of Science in Medicine and Doctor of Medicine**

Regular students in this course will complete two years of work aggregating at least thirty-six prescribed hours in Columbian College, and the four-year course in the Department of Medicine. On the completion of this six-year course the student will receive at the same time the degrees of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

Biological Sciences:	HOURS
Zoology, 1.....	3
Botany, 1, 2.....	3
Chemistry, 1, 3, 23.....	7
English, 1 or 2.....	3
German or French or Spanish.....	6
History.....	3
Mathematics, 3 or 6.....	3
Physics, 1 or 3, and 2.....	5
Psychology and Logic.....	3
Total.....	36

*Department of Medicine.*—The four-year course for the degree of Doctor of Medicine.

**SCHEDULE OF REQUIRED SUBJECTS FOR THE FIRST TWO YEARS**

	MON.	TUES.	WED.	THURS.	FRI.	SAT.
9.15	Math. 3	English 3	Math. 3	English 3	Math. 3	English 3
10.15	French 3 Math. 9 Phil. 1	English 1 Physics 2	French 3 Math. 9 Phil. 3	English 1 Physics 2	French 3 Math. 9 Phil. 1	English 1
11.15	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 20 French 1 German 3 Greek 2	German 1
1.45	German 5 Graphics 1 Latin 2 Physics 3	Chem. 2	German 5 Graphics 1 Latin 2 Physics 3	Chem. 2	German 5 Latin 2 Physics 3	
2.45	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 English 5	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 English 5	Greek 1 Hist. 1, 2	
3.45	Graphics 1 Hist. 3, 4 Latin 1 Spanish 2	Chem. 2	Graphics 1 Hist. 3, 4 Latin 1 Spanish 2	Chem. 2	Hist. 3, 4 Latin 1 Spanish 2	
5.00	English 2 Geology 1 Physics 1 Math. 4 Phil. 2 Spanish 1 Zoology 1	Botany 1, 2 Chem. 1 French 4 German 2 Hist. 32 Geology 3 Greek B	English 2 Physics 1 Math. 4 Phil. 4 Spanish 1 Zoology 1	Botany 1, 2 Chem. 1 French 4 German 2 Hist. 32 Greek B	English 2 Geology 1 Phil. 2 Physics 1 Math. 4 Spanish 1 Zoology 1	Botany 1, 2 Chem. 1 French 4 German 2
5.50	Econ. 20 English 4 Geology 2 Math. 12 Math. 6 Zoology 2	Chem. 6 French 2 German 4 Hist. 5, 6	Econ. 20 English 4 Math. 12 Math. 6 Zoology 2	French 2 German 4 Hist. 5, 6	Econ. 20 English 4 Geology 2 Math. 12 Math. 6 Zoology 2	French 2 German 4

**CONSULAR SERVICE**

Subjects that are of value in preparation for the Consular Service may be made the major interest in the electives of regular students, and may be taken by special students desiring such preparation. Subjects are offered in Commercial Geography, International Law, Economics, Business Organization, Current Events, Commercial and Maritime Law, Modern Languages.

**COLLEGE OF ENGINEERING AND MECHANIC ARTS****ADMISSION**

Candidates for admission to the Freshman Class in the Engineering Courses are required to present fifteen units for admission, distributed as follows:

	UNITS
English.....	3
French or German.....	4
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Chemistry.....	1
Physics.....	1
Electives.....	2
Total.....	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

Candidates for admission to the Freshman Class in the Architectural Course are required to present fifteen units for admission, distributed as follows:

	UNITS
English.....	3
French or German.....	2
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Electives.....	6
Total.....	15

For detailed descriptions of the requirements in each preparatory subject see pages 51-58.

For admission to advanced standing or as a special student, see page 59.

**COURSES FOR A DEGREE**

Four courses of study are offered:

- I. CIVIL ENGINEERING.
- II. ELECTRICAL ENGINEERING.
- III. MECHANICAL ENGINEERING.
- IV. ARCHITECTURE.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, in Mechanical Engineering, and in Architecture, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above engineering degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

**REQUIREMENTS FOR A DEGREE**

The arrangement of the topics in each of the regular courses for degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of Department Subjects on pages 79-109, to which reference should be made for more complete description.

**COMMON TO ALL ENGINEERING COURSES****Freshman Year**

Chemistry, 1, 7.

General Chemistry and Qualitative Analysis.

English, 1 or 2.

Rhetoric.

French or German.

Graphics, 1.

Mechanical and Freehand Drawing.

Mathematics, 9 or 12.

Trigonometry; Analytic Geometry.

**CIVIL ENGINEERING COURSE****Sophomore Year**

Civil Engineering, 1, 3, 4.

Surveying; Highway Engineering; Materials of Construction.

French or German.

Graphics, 8.

Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Physics, 1, 2.

General Physics; Laboratory Physics.



**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Chemistry, 6.

Metallurgy.

Civil Engineering, 2, 8, 9, 22.

Railroad Engineering; Practical Astronomy; Testing Laboratory; Theory of Structures.

Electrical Engineering, 6.

Industrial Electricity

Geology, 2.

**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Civil Engineering, 20, 21, 23, 24.

Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.

Economics, 33.

Commercial Law.

**ELECTRICAL ENGINEERING COURSE****Sophomore Year**

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1.

Mechanism.

Physics, 1, 2.

General Physics; Laboratory Physics.

**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Chemistry, 6.

Metallurgy.

Electrical Engineering, 1, 2, 4, 5.

Elementary Electricity and Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory.

Mechanical Engineering, 20, 21.

Steam Engineering; Boilers.

**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Economics, 33.

Commercial Law.

Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.

Electrical Designs; Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory; Electric Lighting; Electric Railways.

Mechanical Engineering, 10, 23.

Engineering Laboratory; Hydraulic Machinery.

**MECHANICAL ENGINEERING COURSE****Sophomore Year**

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1.

Mechanism.

Physics, 1, 2.

General Physics; Laboratory Physics.

**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Civil Engineering, 22.

Theory of Structures.

Mechanical Engineering, 6, 9, 20, 21, 24, 28.

Engineering Drawing; Engineering Laboratory; Steam Engineering; Boilers; Cotton Machinery and Machine Tools; Industrial Management.

**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Chemistry, 6.

Metallurgy.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Economics, 33.

Commercial Law.

Electrical Engineering, 7.

Dynamos and Motors.

Mechanical Engineering, 7, 10, 22, 23, 26, 27.

Machine Design; Engineering Laboratory; Gas Engines;  
Hydraulic Machinery; Dynamics of Machinery; Power Plant  
Design.

### COURSE IN ARCHITECTURE

#### Freshman Year

Architecture, 2, 3, 4.

Free-hand Drawing; Architectural Drawing and Elementary  
Design; Projections, Shades, Shadows and Perspective.

English, 1 or 2.

Rhetoric.

French.

Mathematics, 9 or 12.

Trigonometry; Analytic Geometry.

#### Sophomore Year

Architecture, 5, 6, 8.

Architectural Design; Free-hand Drawing; History of Archi-  
tecture.

English, 3 or 4.

Humanistic Studies.

French.

Geology, 2.

#### Junior Year

Architecture, 20, 21, 22, 24, 25, 33.

History of Architecture; Building Construction; Sanitation;  
Pen and Ink Rendering; Design; Water Color.

Physics, 1 or 3.

General Physics.

#### Senior Year

Archaeology, 20.

History of Art.

Architecture, 27 or 37, 39, 40, 41, 43.

Design; Building Construction; Water Color; Heating and  
Ventilating; Office Practice.

Economics, 33.

Commercial Law.

Electrical Engineering, 26.

Electric Lighting and Illumination.

## TEACHERS COLLEGE

The purpose of the Teachers College is to provide (a) collegiate training for teachers, (b) instruction in education as a department of science.

The aims of the Teachers College may be summarized as follows:

- a. To promote the knowledge of educational science.
- b. To fit students for the higher positions in the public school service.
- c. To secure to teaching the rights and prerogatives of a profession.
- d. To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

## ORGANIZATION

In order to combine to the best advantage a general college education with adequate professional training for teaching, the Teachers College provides a four years' college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to the professional courses and to specialization in the subjects which the student expects to teach.

Inasmuch as a large number of teachers in service are without college degrees, and a still larger number desire to supplement their professional training by taking special courses, the courses of instruction have been arranged to meet the needs of teachers in service, as well as of undergraduate students. The required courses constituting the prescribed work in education are given both in the morning and in the late afternoon hours, and are, therefore, easily accessible both to students and to teachers from the schools.

## ADMISSION

Candidates for admission to the Freshman Class in the Teachers College must meet the general admission requirements (p. 49) of fifteen units. *Three of these must be in English, two and one-half in Mathematics, and two in one of the following languages: Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

Persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

Graduates of approved Normal Schools, Training Colleges, or Technical Schools, and teachers of experience who have studied privately, will be admitted to such advanced standing as the courses they have pursued warrant.

For further information concerning admission as special student or to advanced standing, see p. 59.



## GRADUATION

On the completion of courses of study aggregating at least sixty hours, the University confers the degree of Bachelor of Arts and a Teacher's Diploma. (An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year.) These courses are partly prescribed and partly elective, and the degree is conferred when the necessary work is completed, no time limit being set. The prescribed courses are the following:

## a. In general culture subjects:

	HOURS
Biology*.....	3
English.....	3
Foreign Language*.....	6
History*.....	6
Psychology and Logic.....	3
Philosophy.....	3

For the subjects marked with an asterisk (\*) electives may be substituted to the extent that approved secondary school work has been done in these subjects. The foreign language requirement must fall in one language, while in history it is required that a survey of the world's history be obtained, and to the extent that this survey has not been obtained before entering college will college work in history be required.

b. In professional subjects ten hours are required of which the following seven are prescribed, although teachers of experience may substitute an elective in education, counting two hours, for Observation and Practice Teaching.

	HOURS
History of Education.....	2
Principles of Education }	2
Principles of Teaching }	
School Hygiene.....	1
Observation and Practice Teaching.....	2

In order that the student may receive a thorough grounding in the branches that he wishes to teach, the electives are subject to the following restrictions:

All regular students must complete before graduation at least nine hours in a Major, and at least five hours in a Minor subject, in addition to the first required course, if any, in the same subject.

As a Major, any one of the following subjects, or group of subjects, may be chosen: English, Latin, Greek, French, German, Mathematics, Physical Science, Biological Science, History, Economics and Political Science, Philosophy and Psychology.

As a Minor, choice may be made of any of the other subjects in the same list, or of Education.

### THE TEACHERS DIPLOMA

The Teacher's Diploma is granted in connection with the Bachelor of Arts degree upon the fulfillment of the following condition: *a.* The student must have satisfactorily completed the courses of study defined above. *b.* He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has satisfied the requirements *a* and *b* above, or in lieu of *a* has completed equivalent work in another institution.

A student holding a bachelor's degree from an approved college or university may, by satisfying the professional requirements, earn the Teacher's Diploma without registering for a degree.

### OBSERVATION AND PRACTICE TEACHING

Ample opportunity is afforded for observation and practice teaching by (*a*) attendance upon observation classes conducted by experienced teachers, and (*b*) actual practice in teaching under supervision and criticism.

### EXPERIMENTAL WORK

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the study of methods and other practical educational problems.

### TEACHERS APPOINTMENT BUREAU

The Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the Teachers College, or in Columbian College, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," Teachers College, The George Washington University.

## COURSES OF INSTRUCTION

## PROVIDED BY THE DEPARTMENT OF ARTS AND SCIENCES

Courses of instruction are divided into three sections.

First-section courses may be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degree; they serve, however, with additional work, as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses 20 to 49, inclusive; third-section courses, 50 and upwards. The number of hours, unless otherwise specified, indicate hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry count one-third unit each, in other subjects one-half unit each. Laboratories and drawing-rooms will be open from 9.15 a.m. till 10 p.m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

## APPLIED MATHEMATICS

See Engineering.

## ARCHAEOLOGY AND HISTORY OF ART

MITCHELL CARROLL, Ph.D.....	Professor
REBECCA SHERMAN ASHLEY.....	Assistant

*Second Section. For Undergraduates and Graduates*

20. *History of Art*.—An introductory course treating important periods in Greek, Roman and Renaissance Architecture, Sculpture and Painting. Illustrated lectures and conferences. *Tu., Th., at 4.00.* Professor CARROLL.

21. *History of Art*.—An advanced course treating important periods in Greek, Roman and Renaissance Architecture, Sculpture and Painting. Illustrated lectures and conferences, *Tu., Th.*, at 5.00. Professor CARROLL and Miss ASHLEY.

*Third Section. Primarily for Graduates*

50. *Classical Archaeology*.—Topography and Monuments of Athens and Rome. Two hours. Professor CARROLL.

51. *Ancient Art*.—A course in the history of Egyptian, Assyrian, Persian, Greek and Roman Architecture. Professor CARROLL.

52. *Life, Literature, and Art of the Homeric Age*.—Professor CARROLL.

Use is made of the illustrative material in the Library of Congress, the National Museum and the Corcoran Gallery of Art. Students are invited to the open meetings of the Washington Classical Club and the Washington Society of the Archaeological Institute of America.

**ARCHITECTURE**

PERCY ASH, S.B., C.E.....	Professor
ALBERT BURNLEY BIBB.....	Professor
ALBERT LEWIS HARRIS, B.S. in Arch.....	Assistant Professor
PHILIP ROGERS HOOTEN.....	Instructor

*First Section. Primarily for Undergraduates*

2. *Freehand Drawing*.—To be taken at the Corcoran Gallery of Art. Two periods.

3. *Architectural Drawing and Elementary Design*.—This course includes the study of the elements of Architecture including the Five Orders, the use of india ink and water color rendering. At least nine hours per week are to be spent by the student in the drafting room.

Criticisms by Professor ASH on Tuesday and Friday evenings and by Mr. HOOTEN on Monday, Wednesday and Thursday evenings.

4. *Projections, Shades, Shadows and Perspective*.—A course in orthographic projections, shades and shadows, followed by a short course in perspective. Two hours.

Criticisms by Mr. HOOTEN on Wednesday evenings.

5. *Design*.—In this course the student is taught to combine the elements of Architecture with which he has become familiar in Architecture 3, in simple and harmonious compositions. Simple problems in plan and Archaeology are also given. At least twelve hours per week are to be spent by the student in the drafting room.

Criticisms by Professor ASH on Tuesday and Friday evenings and by Mr. HOOTEN on Monday, Wednesday and Thursday evenings.

6. *Freehand Drawing*.—Advanced course. To be taken at the Corcoran Gallery of Art. Two periods.



8. *History of Architecture*.—The course is designed to trace the development of the art in Ancient Egypt, in Greece, and in Rome, and through the early Christian, Byzantine, and Mediaeval periods. *Tu., Th., Sat.*, at 5.00. Professor BIBB.

*Second Section. For Undergraduates and Graduates*

20. *History of Architecture*.—An advanced course offering a critical study of the architecture of the Renaissance in Italy, France and England, and of its effect upon the building arts of our own time. *Tu., Th., Sat.*, at 5:50. Professor BIBB.

21. *Building Construction*.—Frame buildings, details of construction, interior finish, three-fourths scale and full size details. One lecture and three hours in drafting room. Assistant Professor HARRIS.

22. *Sanitation*.—History of sanitation; pollution of water sources; modern plumbing practice; methods of sewage disposal, septic tank, sewage disposal fields, etc. Two lectures a week for one term. Assistant Professor HARRIS.

24. *Pen and Ink Rendering*.—A study of the renderings of the best pen and ink draftsmen with practice in the use of the pen as a means of Architectural expression. One hour.

Hours of criticism selected by conference with Professor ASH.

25. *Design*.—This course includes plan problems, sketch problems, and problems in Archaeology of a more advanced nature than are given in Architecture 5. At least fifteen hours a week are to be spent by the student in the drafting room.

Criticism by Professor ASH on Tuesday and Friday evenings and by Mr. HOOTEN on Monday, Wednesday and Thursday evenings.

27. *Advanced Design*.—Design problems of an advanced nature including group plans are given during the first semester. The second semester is devoted to a thesis, the subject being selected by the student subject to the approval of the Professor of Design. At least eighteen hours a week are to be spent by the student in the drafting room.

Criticism by Professor ASH on Tuesday and Friday evenings and by Mr. HOOTEN on Monday, Wednesday and Thursday evenings.

33. *Water Color*.—Drawing in water color from still life models, from architectural interiors, and from buildings and gardens. Two hours. Professor BIBB.

37. *Beaux Arts Problems*.—In place of the Design of Architecture 27, Senior students may take the Beau Arts Problems, Class A, given at the Atelier, of the Washington Architectural Club, under Mr. BEDFORD BROWN.

39. *Building Construction*.—Masonry foundations, pile foundations, stone work, brick work, fire-proofing, ornamental terra cotta, plastering, specifications. One lecture and three hours in drafting room a week. Assistant Professor HARRIS.

40. *Water Color*.—Advanced course. A continuation of course 33. Two hours. Professor BIBB.

41. *Heating and Ventilating*.—Elementary principles of heating and ventilating; details of installation of hot air, hot water, and steam heating plants. Two lectures for one term. Assistant Professor HARRIS.

43. *Office Practice*.—A course of lectures on office practice, business methods of an Architect and special types of buildings by the teaching staff and practicing Architects of the District of Columbia. One hour.

### ASTRO-PHYSICS

FREDERICK EUGENE FOWLE, JR.....Lecturer

#### *Third Section. Primarily for Graduates*

54. A lecture course on the astro-physical instruments employed in modern research. Mr. FOWLE.

### BIOLOGICAL SCIENCE

PAUL BARTSCH, Ph.D.....Professor

ALBERT MANN, Ph.D.....Professor

JULIA THECKLA MACMILLAN, A.M.....Instructor

GEORGE TRAVER HARRINGTON, B.S. in Agri., B.S. in Chem.....Instructor

#### **Zoology**

#### *First Section. Primarily for Undergraduates*

1. *Systematic Zoology*.—I. Invertebrates. This includes lectures and laboratory work. The lectures cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, *Mon.*, at 5.00; laboratory, *Wed., Fri.*, 5.00-6.40. Professor BARTSCH and Miss MACMILLAN.

2. *Systematic Zoology*.—II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrates, and correlated with these is the study and dissection of typical specimens of each group. Open only to students having completed Course 1. Lecture, *Mon.*, at 5.50; laboratory *Wed., Fri.*, 5.00-6.40. Professor BARTSCH and Miss MACMILLAN.

#### *Second Section. For Undergraduates and Graduates*

20. *Practical Zoology*.—A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoology. Open to all students. One hour. Professor BARTSCH.

23. *Ornithology*.—A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Professor BARTSCH and Miss MACMILLAN.

Laboratory courses in histology and physiology will be arranged for competent students.

### Botany

#### *First Section. Primarily for Undergraduates*

1. *General Botany*.—An introductory course dealing with the fundamental concepts of plant life. Representative members of the different groups of plants will be studied, and lines of evolutionary development will be emphasized. First half-year. Lecture, *Th.*, at 5.00; laboratory, *Tu.*, and *Sat.*, 5.00-6.40. Mr. HARRINGTON.

2. *Morphology of the Seed Plants*.—A study of the structures of root, stem, leaf, flower, and fruit of the seed plants, with incidental reference to the physiology of the plant and its relation to its environment. Second half-year. Lecture, *Th.*, at 5.00; laboratory, *Tu.* and *Sat.*, 5.00-6.40. Mr. HARRINGTON.

#### *Third Section. Primarily for Graduates*

50. Original investigation in (a) Economic Botany, *Materia Medica*, etc.; (b) Parasitism and Monstrosities; (c) Researches in Physiology of single groups; (d) Comparative Organography. Professor MANN.

### BOTANY

See Biological Sciences.

### CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....	Professor
FRANK WIGGLESWORTH CLARKE, Sc.D.....	Professor
HARVEY WASHINGTON WILEY, Ph.D., M.D., LL.D.....	Professor
NEVIL MONROE HOPKINS, Ph.D.....	Assistant Professor
EDWIN ALLSTON HILL, Ph.D.....	Assistant Professor
THOMAS MALCOLM PRICE, Ph.D.....	Assistant Professor
OTIS DOW SWETT, LL.M., S.M.....	Assistant Professor
HIRAM COLVER MCNIEL, Ph.D.....	Assistant Professor

#### *First Section. Primarily for Undergraduates*

1. *General Chemistry*.—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and tech-



nical chemistry. *Tu., Th., Sat.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

2. *Laboratory Practice*.—A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiment. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

3. *Preparation and Study of the Properties of Chemical Substances*.—A laboratory course. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

4. *Assaying and Metallurgy of the Precious Metals*.—Carried on by the method used by the Government Assayers, the Laboratory being fitted up on the plan of that of the United States Mint. Twelve hours for three months. Professor MUNROE, Assistant Professor SWETT.

5. *Principles of Analysis*.—Lecture. One hour. Professor MUNROE.

6. *Metallurgy of Iron and Steel*.—A course of lectures and readings. *Tu.*, at 6.00. Professor MUNROE.

7. *Qualitative Analysis*.—A brief course intended primarily for students in engineering. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE. Assistant Professor SWETT.

#### *Second Section. For Undergraduates and Graduates*

20. *Qualitative Analysis*.—A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

21. *Quantitative Analysis*.—A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

23. *Organic Chemistry*.—Advanced course. *Wed., Fri.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

24. *Organic Chemistry*.—Advanced course. A continuation of Course 23. *Th., Sat.*, at 6.00. Professor MUNROE, Assistant Professor SWETT.

25. *Chemistry of the Carbon Compounds*.—A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor MUNROE, Assistant Professor SWETT.

26. *Physical Chemistry*.—A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. In this course special attention is given to the ionic theory, electro-chemistry, the law of mass action, and the phase rule. Two hours. Assistant Professor McNEIL.

27. *Stereo-Chemistry*.—This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught



how to form models by which to illustrate their arrangements. Two hours. Assistant Professor HILL.

28. *Biochemistry*.—A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Assistant Professor PRICE.

### *Third Section. Primarily for Graduates*

50. *Explosive Substances*.—Professor MUNROE.

51. *Analytical Methods*.—Professor MUNROE.

53. *Development of the Theory of the Constitution of the Natural Silicates*.—Professor CLARKE.

54. *Special Researches in Agricultural Chemistry*.—Professor WILEY.

55. *Special Researches in Electro-Chemistry*.—Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington which are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p.m., and also the meetings of the Chemical Society of the George Washington University which is a most active and efficient student organization.

## CIVIL ENGINEERING

See Engineering.

## CLASSICAL LANGUAGES AND LITERATURES

CHARLES SIDNEY SMITH, Ph.D.....Professor  
MOSES WALTON HENDRY, A.B., LL.B.....Assistant

### Greek

#### *First Section. Primarily for Undergraduates*

A. *Elementary Course*.—For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. Three hours. Not given in 1913-14.

B. *Homer: Iliad I-IV or Odyssey V-VIII*.—For students who have taken Course A and desire to prepare themselves to enter Course 1. Tu., Th., at 5.00.

1. Herodotus (selections); Lysias (selected orations); Euripides (*Alcestis*); Greek prose composition. Mon., Wed., Fri., at 2.45.

2. Xenophon (*Memorabilia*); Thucydides (Book VII); Sophocles (*Antigone*). Mon., Wed., Fri., at 11.15.

*Second Section. For Undergraduates and Graduates*

20. Plato (selections, including the Apology and Crito); Aristophanes (Clouds or Frogs). *Tu., Th.*, at 1.45.

21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections) Two hours. Not given in 1913-14.

**Latin***First Section. Primarily for Undergraduates*

1. Livy (Books I and XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. Open to students who have satisfied the admission requirements in elementary and advanced Latin. *Mon., Wed., Fri.*, at 3.45.

2. Cicero and Pliny (selected Letters); Horace (Satires and Epistles); Martial (selections). *Mon., Wed., Fri.*, at 1.45.

*Second Section. For Undergraduates and Graduates*

20. Tacitus (selections); Terence (Phormio); Plautus (Captivi).—Two hours. Not given in 1913-14.

21. *Roman Literary Criticisms*.—(Quintilian, Book X, and Horace, *Ars Poetica*); Catullus, Tibullus, and Propertius. *Tu., Th.*, at 11.15.

22. *Advanced Latin Composition and Reading at Sight*.—Practice in Latin expression and style. *Th.*, at 2.45.

*Third Section. Primarily for Graduates*

The work in this Section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

50. *Vergil and Roman Epic Poetry*.—Hours to be arranged.

51. *Caesar, and the Roman Historians*.—Not given in 1913-14.

52. *Cicero, and Roman Oratory*.—Not given in 1913-14.

**ECONOMICS AND SOCIOLOGY**

ROBERT RUSS KERN, A.B. .... Assistant Professor  
OSCAR PHELPS AUSTIN. .... Lecturer

*Second Section. For Undergraduates and Graduates*

20. *General Economics*.—An outline course in the principles of political economy, devoted mainly to the study of production and exchange under present-day conditions. Given in two sections. First half-year. *Mon., Wed., Fri.*, at 11.15 (Section a); at 5.50 (Section b), Assistant Professor KERN.

21. *The Economics of Distribution and Consumption*.—A continuation of Course 20, devoted mainly to the problems of rent, interest, wages, and profits, and including an examination of competition, private property, luxury, saving, and speculation, in their effects upon human welfare. Given in two sections. Second half-year. *Mon., Wed., Fri.*, at 11.15 (Section a); at 5.50. (Section b), Assistant Professor KERN.

22. *General Sociology*.—An outline course in the principles of sociology, devoted mainly to the study of social origins and the development of existing social institutions, with special attention to social psychology. Two hours, first half-year. *Mon., Fri.*, at 5.00. Assistant Professor KERN.

23. *Modern Social Problems*.—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year. *Mon., Fri.*, at 5.00. Assistant Professor KERN.

24. *The History of Economic Thought*.—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. *Tu., Th.*, at 5.00. Given in alternate years. Not given in 1913-34. Assistant Professor KERN.

25. *Social Psychology*.—A study of the psychological nature of man; his instincts, feelings, and passions as social forces; an inquiry into the development of these forces, and the reaction of the social mind upon the individual; an investigation of the theories of Giddings, Tarde, Ross, and McDougall. Second half-year. *Tu., Th.*, at 5.50. Given in alternate years. Not given in 1913-14. Assistant Professor KERN.

26. *Public Finance*.—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. First half-year. *Tu., Th.*, at 5.00. Assistant Professor KERN.

27. *Money and Banking*.—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. Second half-year. *Tu., Th.*, at 5.00. Assistant Professor KERN.

33. *Commercial and Maritime Law*.—An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts,

sales, bailments, agency, partnership, negotiable instruments, and common carriers. Two hours.

37. *Commercial Geography and Business Organization*.—The products, industries, and commerce of the various countries and sections of the world; the exchanges between climatic sections and between the great producing and manufacturing sections and countries of the world; the staple articles of commerce, their places of production and sale; manufacturing industries and the distribution of their products; the transportation and financial systems by which interchanges are facilitated; a comparative view of the commercial, economic, and financial conditions in the various sections and countries of the world. *Mon., Fri.*, at 5.50. Mr. AUSTIN.

*Primarily for Graduates.*

51. *Seminar in Sociology*.—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Professor VEDITZ and Assistant Professor KERN.

#### EDUCATION

WILLIAM CARL RUEDIGER, Ph.D.....	Professor
WILLARD STANTON SMALL, Ph.D.....	Lecturer
ARTHUR DEERIN CALL, A.M.....	Lecturer
MARIETTA STOCKARD.....	Lecturer

*Second Section. For Undergraduates and Graduates*

20a. A comprehensive course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. First half-year. *Mon., Wed., Fri.*, at 9.15. Professor RUEDIGER.

20b. A comprehensive course in the principles underlying the teaching process in its intellectual, emotional and motor phases. Special attention is given to making teaching concrete and meaningful. Second half-year. *Mon., Wed., Fri.*, at 9.15. Professor RUEDIGER.

21a. A brief course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. First half-year. *Sat.*, 10.15-12.15. Professor RUEDIGER.

21b. A brief course in the psychological and logical principles underlying the teaching process. Second half-year. *Sat.*, 10.15-12.15. Professor RUEDIGER.

(Courses 20 and 21 should be preceded or accompanied by general psychology. Course 21 is designed especially for teachers in service.)

22. *History of Education*.—A general course in the historical development of educational theory and practice. *Tu., Th.*, at 4.00. Professor RUEDIGER.



23. *Child Study*.—The psychology, physiology, and hygiene of childhood and adolescence, with special reference to the problems of teaching. Kirkpatrick's *Fundamentals of Child Study*, supplemented by lectures, assigned reading, and reports. Prerequisite: General Psychology. Sat., 10.15-11.15. Dr. SMALL.

24. *School Sanitation and Hygiene*.—A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. Sat., 11.15-12.15. Dr. SMALL.

25. *Secondary Education*.—A practical course for actual or prospective high-school teachers, considering the history and function of American and foreign secondary education, and the values, essential content, and method of presentation, of the high-school branches. Wed., Fri., at 4.00. Not given in 1913-14. Professor RUEDIGER.

26. *Elementary Education*.—Theory and Practice. On the theoretical side this course will deal briefly with the general principles involved in self culture, our moral ideal, the state and society, the problem of study, the teaching process, lesson assignment, the recitation, and the art of questioning. The principles developed will be somewhat extensively applied to the teaching of reading, English, American history, geography, arithmetic, and perhaps nature study. Tu., Th., at 5.00. Mr. CALL and Professor RUEDIGER.

(Courses 25 and 26 will be given in alternate years.)

27. *School Administration*.—The public school system: Its development; economic and political relations; organization of administration, financial and educational; problems of administration. Lectures, assigned reading, and reports. Sat., at 9.15. Dr. SMALL.

28. *Experimental Education*.—After a brief introduction to the experimental investigation of sensation, movement, and association, this course will be devoted to experiments in educational psychology. Among the topics to be investigated will be: habit formation; memorizing; the transfer of practice; the effectiveness of various motives in study; the effectiveness of different methods of presentation; the application of the Binet tests. Mon., 4.00-5.50. Not given in 1913-14. Professor RUEDIGER.

29. Study of type stories, adaptation of stories, practical story telling. It is the purpose of the course to develop a basis for the selection and presentation of suitable children's literature, taking into consideration the various stages of the child's development.

Lectures, required reading and reports. Mon., Wed., at 4.00. Miss STOCKARD.

30a. *Class Management*.—A consideration of the practical problems of the class-room, including economy in class management, attendance, discipline, physical conditions, the daily program, and the technique of

class instruction. Class discussion, lectures, and assigned readings. *Wed.*, at 5.00. First half-year. Not given in 1913-14.

30b. *School Supervision*.—A course involving the study of the relations of teachers to supervising officers, the principles of helpful criticism, the testing of class work, the conducting of teachers meetings, and the rating of teachers. Class discussions, lectures, and assigned readings. *Wed.*, at 5.00. Second half-year. Not given in 1913-14.

31. *Observation and Practice Teaching*.—The aim of this course is (a) to provide under guidance for the observation of the applications of general educational principles and of methods of teaching and (b) to lead the student-teacher to form the connection between theory and practice in teaching and to establish right teaching habits. Two hours. Professor RUEDIGER.

32. *Adolescence*.—A consideration of the psychology of adolescence, with special reference to the problems of secondary education. Lectures, readings, and special topics. *Sat.*, at 9.15. (Courses 27 and 32 will not both be given.) Dr. SMALL.

### *Third Section. Primarily for Graduates*

50. *Seminar in Education*.—The theme for 1913-14 will be current educational topics. The significant periodical literature will be reviewed from month to month, the reports and bulletins issued by the United States Bureau of Education will be discussed, the proceedings of the National Education Association will be examined, and recent educational books will be reviewed. Each member of the class will be given an opportunity to investigate and report upon some present educational tendency. Open to qualified undergraduates. *Wed.*, 3.30-5.00, or at an hour to be arranged. Two hours credit. Professor RUEDIGER.

## ELECTRICAL ENGINEERING

See Engineering.

## ENGLISH

WILLIAM ALLEN WILBUR, A.M.....	Professor
RICHARD COBB, A.B.....	Assistant Professor
EDWIN WILEY, Ph.D.....	Lecturer

### *First Section. Primarily for Undergraduates*

1. *English Rhetoric*.—A study of the principles of self expression through language with practice in composition. *Tu., Th., Sat.*, at 10.15. Professor WILBUR.

2. *English Rhetoric*.—Parallel with Course 1. *Mon., Wed., Fri.*, at 5.00. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English.

3. *Humanistic Studies*.—The Faerie Queen; Advancement of Learning, Book I; Holy Dying, Volume I; Pepys' Diary; Evelina; Endymion. First half-year.

The Federalist; Past and Present; The English Mail Coach; Essays of Elia; Twice Told Tales; The Scarlet Letter; Poe's Tales. Second half-year. *Tu., Th., Sat.*, at 9.15. Professor WILBUR.

4. *Humanistic Studies*.—Euphues; The Shepherd's Calendar; Pilgrim's Progress; The Complete Angler; Pride and Prejudice; Emma; Persuasion; Vanity Fair; The House of Seven Gables; Sartor Resartus; The Merry Men: First half-year.

Idylls of the King; In Memoriam. Second half-year. *Mon., Wed., Fri.*, at 5.50. Professor WILBUR.

5. *English Literature*.—Eighteenth century, first half-year. Nineteenth century, second half-year. *Tu., Th.*, at 2.45. Assistant Professor COBB.

#### *Second Section. For Undergraduates and Graduates*

20. *English Composition*.—*Tu., Th.*, at 11.15. Assistant Professor COBB.

22. *Shakespeare*.—The Comedies. Given alternate years. Not given 1913-14.

23. *Shakespeare*.—The Tragedies. *Mon., Wed., Fri.*, at 9.15. Professor WILBUR.

(The Temple edition of Shakespeare is recommended.)

26. *Chief American Poets*.—Studies in Poetry. *Tu., Th.*, at 5.00. Professor WILBUR.

#### *Third Section. Primarily for Graduates*

54. *English Seminar*.—Graduate students engaged in individual research will discuss assigned topics in a seminar of English studies, meeting each week at an appointed time.

### ENGINEERING

EDWIN VIVIAN DUNSTAN, C.E.....	Professor
OSCAR ALEXANDER MECHLIN, C.E.....	Professor
FRANK CHARLES STARR, S.B.....	Assistant Professor
CHARLES WARD MORTIMER, M.E.....	Assistant Professor
HAYNER HASKELL GORDON, E.E., Ph.D.....	Instructor
ROBERT WILBUR MORSE, S.B.....	Instructor
MARK RITTENHOUSE WOODWARD, E.E.....	Instructor

#### **Applied Mathematics**

#### *Second Section. For Undergraduates and Graduates*

20. *Analytical and Applied Mechanics*.—(1) Statics: including the composition, resolution and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear



and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotary motion; impact; work and energy; moment of inertia. Four hours, first half-year. Professor DUNSTAN.

21. *Hydraulics*.—The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Four hours, first half-year. Professor DUNSTAN.

22. *Mechanics of Materials and Theory of Elasticity*.—Including elastic and ultimate strength and deformation: simple cantilever and continuous beams; columns, torsion; combined stresses; compound columns and beams: including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours, second half-year. Professor DUNSTAN.

### Civil Engineering

#### *First Section. Primarily for Undergraduates*

1. *Surveying and Mapping*.—This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, projection of maps, etc. The course includes plotting survey notes, topographic symbols, lettering. Two hours a week. Field work, usually on Saturday. One drawing period a week. Assistant Professor STARR.

2. *Railroad Engineering*.—Railroad curves and earthwork; location of about a mile of railroad; laying out curves; construction of contour maps, profiles, mass diagrams, etc. Two hours a week recitation both terms and one period drawing second term; field work usually on Saturdays. Assistant Professor STARR.

3. *Highways and Pavements*.—Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. Two hours, second term. Professor MECHLIN.

4. *Materials of Construction*.—A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc., with reference to processes of manufacture. The course is supplemented by a number of practical tests made by the students. Two lectures and one laboratory period during first term. Professor MECHLIN.

5. *Surveying Instruments*.—A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours. Assistant Professor STARR.

6. *Foundations*.—A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours. Professor MECHLIN.

8. *A Course in Practical Astronomy for Civil Engineering Students*.—Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for



each being a required part of the course. Two lecture-recitation periods during one term. Assistant Professor STARR.

9. *Mechanical Testing*.—A laboratory course in the investigation of the physical properties of engineering material, including exercises in the use of a 200,000 pound Olson Testing Machine. Eighteen periods of two hours each in the second term.

*Second Section. For Undergraduates and Graduates*

20. *Masonry Construction*.—A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods. Professor MECHLIN.

21. *Hydraulic Engineering*.—The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing system; water rights and irrigation law. Four lectures and two design periods, second term. Professor DUNSTAN.

22. *Theory of Structures*.—A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods. Assistant Professor DUNSTAN.

23. *Theory of Structures*.—The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel-mill and office-building construction. Three lectures and two design periods. Professor MECHLIN.

24. *Sanitary Engineering*.—This course treats on the drainage of buildings and lands; the treatment and disposal of sewage and the sewerage of cities and towns; public water supply and methods of water purification. Three lectures and one design period. Professor MECHLIN.

*Third Section. Primarily for Graduates*

50. *Advanced Masonry*.—A course in the theory and design of reinforced concrete structures. Professor MECHLIN.

51. *Advanced Masonry*.—The theory of retaining walls and arches. Professor MECHLIN.

52. *Testing of Materials*.—This course involves original research upon assigned topics. Professor MECHLIN.

53. *Water-Power Development*.—A comparative study of the principal water-power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon. Professor DUNSTAN.

**Electrical Engineering***First Section. Primarily for Undergraduates*

1. *Elementary Mathematical Theory of Electricity and Magnetism.*—Elementary electricity and magnetism is studied with special attention to the needs of engineering students. The phenomena accompanying static electricity are noted. Problems illustrating the theory and having practical application are required to be solved. Two hours. Assistant Professor MORTIMER.

2. *Elements of Electricity; Direct Current Motors and Generators; Design Work.*—Elements of electricity are studied during the first term and especial emphasis is laid upon the principles underlying the flow of currents. During the second term a study is made of direct current generators and motors, covering the laws of the magnetic circuit as applied to the dynamo. The course includes the design of electrical machinery and apparatus. An introductory study of alternating currents is also begun. Numerous problems are assigned throughout the course. Three hours. Assistant Professor MORTIMER.

4. *Electrical Measurements.*—A laboratory course for Juniors. Selected experiments. Foster's Hand-book and special laboratory notes are used for reference. Two three hour periods, first term. Assistant Professor MORTIMER and Mr. WOODWARD.

5. *Electrical Laboratory.*—Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Two three-hour periods, second term. Assistant Professor MORTIMER and Mr. WOODWARD.

6. *Industrial Electricity.*—A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery, electrical railways and other applications of electric motors. Two hours, first term. Mr. WOODWARD.

7. *Electrical Engineering.*—A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours. Mr. WOODWARD.

8. *Electrical Design.*—A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One recitation period and one drawing period.

*Second Section. For Undergraduates and Graduates*

21. *Alternating Current Theory and Machinery.*—A course for Seniors in Electrical Engineering, covering the principles of single as well as

polyphase currents, including study of machines, circuits, transformers, etc. Four hours. Assistant Professor MORTIMER.

22. *Electrical Distribution*.—A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Crocker's Electric Lighting, second volume, "Distribution System." Two hours. Assistant Professor MORTIMER.

23. *Electrical Applications*.—A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour. Mr. WOODWARD.

24. *Advanced Laboratory Work for Seniors in the Electrical Engineering Course*.—Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's Laboratory and Factory Tests in Electrical Engineering, with Foster's Electrical Engineer's Hand-book for general reference. Two three-hour periods. Assistant Professor MORTIMER.

25. *Inspection of Plants and Industrial Works*.—In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written description submitted by the students.

26. *Electric Lighting and Illumination*.—A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours, first term. Mr. WOODWARD.

27. *Electric Railways*.—A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours, second term. Assistant Professor MORTIMER.

28. *High Frequency Current*.—A lecture course covering the theory of high frequency and oscillatory currents and their application to wireless telegraphy and telephony. The condenser discharge, the theory of resonance in coupled circuits, and electromagnetic waves will be treated. The design of wireless telegraph and telephone apparatus will also be discussed. The class will meet in the laboratory from time to time to familiarize themselves with the use of wireless apparatus. One period. Dr. GORDON.

Juniors and Seniors in Electrical Engineering are expected to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers.



*Third Section. Primarily for Graduates*

52. *Advanced Course in the Mathematical Theory of Alternating Currents.*—Assistant Professor MORTIMER.

53. *Advanced Course in Polyphase Currents.*—Assistant Professor MORTIMER.

54. *Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus.*—Assistant Professor MORTIMER.

55. *Advanced Electric Railways.*—A course including a short history of electric railways, calculation of the theoretical curves, study of different systems and examples of modern installations. Philip Dawson's *Electric Traction on Railways* is used as a basis for the course. Assistant Professor MORTIMER.

**Graphics***First Section. Primarily for Undergraduates*

1. *Mechanical and Freehand Drawing.*—A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Two three-hour periods. Assistant Professor STARR.

2. *Advanced Mechanical Drawing.*—A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawing; proportioning by empirical formulas. Two three-hour periods. Assistant Professor STARR.

8. *Descriptive Geometry.*—A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and developments; warped surfaces; shades and shadows; original construction problems. Two lectures and one drawing period. Assistant Professor STARR.

*Third Section. Primarily for Graduates*

50. *Advanced Graphic Statics.*—A study of the graphical analysis of higher structures, with special reference to the method of influence lines. Professor DUNSTAN.

**Mechanical Engineering***First Section. Primarily for Undergraduates*

1. *Mechanism.*—A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.



Some attention is given to the design of gear teeth, and twenty-five hours in the second term are devoted to valve gears for steam engines. Three lectures and one drawing period. Mr. MORSE.

6. *Engineering Drawing*.—This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Two three-hour periods. Mr. MORSE.

7. *Machine Design*.—This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are:

The complete design of a horizontal single cylinder gas engine, or the design of a steam boiler, a series of shaft couplings, and a fly wheel.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five hours in the drawing room. Mr. MORSE.

9. *Engineering Laboratory*.—A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. Two three-hour periods, second term. Mr. MORSE.

10. *Engineering Laboratory*.—This course is a completion of Course 9. Two three-hour periods.

### *Second Section. For Undergraduates and Graduates*

20. This course deals with the principles of thermo-dynamics; the properties of gases and vapors, especially steam, and the flow of steam through nozzles. The application of the above principles is discussed and the simple and compound steam engine and the steam turbine are studied. Three hours, first term. Dr. GORDON.

21. *Boilers and Power Plant Accessories*.—This course is devoted to a study of boilers, condensers, feed pumps, economizers, stokers, and other power-plant accessories. The design of power plants will be discussed. Three hours, second term. Dr. GORDON.

22. *Gas Engines and Compression and Refrigeration Machinery*.—This course deals with the theory and practice concerning the internal combustion motor. During the second half of the term the theories and principles involved in compression machinery and artificial refrigeration will be discussed. Three hours, second term. Dr. GORDON.

23. *Hydraulic Machinery*.—This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes

a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two hours, second term. Mr. MORSE.

24. *Cotton Machinery and Machine Tools*.—A study of the mechanisms found in cotton machinery and machine tools. Two hours. Mr. MORSE.

26. *Dynamics of Machines*.—A course including a number of the principal applications of dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of the steam engine. Two hours. Mr. MORSE.

27. *Power-Plant Design*.—This course provides for the design with complete plans and specifications of a power plant of industrial proportions by the student. One lecture-recitation hour and two three-hour drawing periods, first term. Dr. GORDON.

28. *Industrial Management*.—A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the method of superintendence and of compensating labor, the determination of the cost of production, and the effect on costs of different systems of distributing indirect expenses. Two hours, second term. Mr. MORSE.

#### FRENCH

See Romance Languages.

#### GEOLOGY AND MINERALOGY

GEORGE PERKINS MERRILL, Ph.D. .... Professor  
RAY SMITH BASSLER, Ph.D. .... Assistant Professor

##### *First Section. Primarily for Undergraduates*

1. *Mineralogy*.—Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Mon., Fri.*, at 5.00.

2. *Geology*.—Systematic geology; dynamical, structural and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work

so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-books: Blackwelder and Barrows' *Elements of Geology*; Merrill's *Rocks, Rock Weathering, and Soils*. *Mon., Fri.*, at 5.50.

3. *Physical Geography*.—A general culture course of lectures, laboratory and field work, treating of the earth as a globe, the atmosphere, the oceans and the lands. *Tu.*, at 5.00

### *Second Section. Primarily for Undergraduates and Graduates*

20. *Economic Geology*.—[Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Weed's *Translation of Beck's Nature of Ore Deposits*; Merrill's *Stones for Building and Decoration and The Non-Metallic Minerals*.

21. *Paleontology*.—A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology.

### *Third Section. Primarily for Graduates*

Advanced study in Geology, both systematic and applied, is arranged to cover two years.

50. *Advanced Geology and Paleontology*.—The student in this first-year course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject.

51. *Advanced Paleontology and Stratigraphic Geology*.—A continuation of Course 21. Besides the study of paleontological methods, the student is expected to pursue some special line of investigation in order to fit himself for original research.

## GERMANIC LANGUAGES AND LITERATURE

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor  
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor

### *First Section. Primarily for Undergraduates*

1. *Elementary*.—The essentials of German grammar; translation of prose and poetry; composition and dictation. This course is open only to beginners, and the work done is equivalent to that of a two years'



course in high schools and academies of good standing. *Tu., Th., Sat.*, at 11.15. Professor SCHOENFELD.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 5.00. Professor SCHMIDT.

3. Selected texts from the best contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued, with special emphasis on syntax, word-formation, and the relationship of German and English. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.*, at 11.15. Professor SCHOENFELD.

4. Parallel with Course 3, except that in the second term scientific German is read. *Tu., Th., Sat.*, at 5.50. Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language: idioms; synonyms; extensive translations of the best English prosaists into German; essays; selected advanced prose; classical reading and literature; German history. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.*, at 1.45. Professor SCHOENFELD.

6. Parallel with Course 5, with special reference to advanced students both in the historico-political and the scientific departments. *Tu., Th.*, at 5.00. Professor SCHOENFELD.

### *Second Section. For Undergraduates and Graduates*

20. *Outline of the History of German Literature and Civilization from the Origins to the Renaissance and Reformation.*—Lectures, readings, essays. *Mon., Wed., Fri.*, at 10.15. Professor SCHOENFELD.

21. *German Literature of the Classic Period at its Zenith.*—Goethe's and Winckelmann's influence on German art; with special reference to the modern German drama; classical ballad and lyric poetry; renaissance of the German *volkslied* in the eighteenth and nineteenth centuries. *Tu., Th., Sat.*, at 10.45. Professor SCHOENFELD.

### *Third Section. Primarily for Graduates*

50. *Epic and Lyrical Poetry in the Twelfth and Thirteenth Centuries, from Heinrich von Veldeke to Gottfried von Strassburg.* Professor SCHOENFELD.

51. *Gothic.*—Introduction to comparative Indo-European Grammar. Two hours. Professor SCHMIDT.

52. *Old High German.*—The development of the German language. Two hours. Professor SCHMIDT.

Only one of the foregoing two courses (51, 52) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page 38.



## GRAPHICS

See Engineering.

## GREEK

See Classical Language.

## HISTORY

CHARLES CLINTON SWISHER, Ph.D., LL.D.....	Professor
BLAINE FREE MOORE, A.M.....	Assistant Professor
LEVI RUSSELL ALDEN, A.M.....	Assistant Professor

*First Section. Primarily for Undergraduates*

1. *Mediaeval History*.—A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions, extending through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

2. *Mediaeval History*.—A history of the evolution of national government extending through the periods of the Renaissance and the Protestant Revolution; texts and assigned readings. Second half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

3. *Modern European History*.—A study of the European States under the new conditions resulting from the discovery of America and the opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures, and collateral readings. First half-year. *Mon., Wed., Fri.*, at 3.45. Professor SWISHER.

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; texts, lectures, and collateral readings. Second half-year. *Mon., Wed., Fri.*, at 3.45. Professor SWISHER.

5. *Mediaeval History*.—Parallel with Course 1. First half-year. *Tue., Th., Sat.*, at 5.50. Professor SWISHER.

6. *Mediaeval History*.—Parallel with Course 2. Second half-year. *Tu., Th., Sat.*, at 5.50. Professor SWISHER.

*Second Section. For Undergraduates and Graduates*

25. *English History*.—A general course with particular attention to constitutional and political development. Text-book, lectures and assigned readings. *Tu., Th., Sat.*, at 11.15. Assistant Professor MOORE.

30. *American Constitutional History*.—A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues. Lectures, text-books, and collateral readings. *Tu., Th., Sat.*, at 5.00. Professor SWISHER.

33. *Current History*.—A discussion of political questions of the day,

with special reference to their origin and historical significance. Lectures throughout the year. *Sat.*, at 11.15. Professor SWISHER.

*Third Section. Primarily for Graduates*

54. *Seminar Work.*—The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the seminars of American and Modern European History.

Undergraduate students qualified by previous historical study, who desire to do intensive work with a view to gaining fuller information upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminars.

INTERNATIONAL LAW AND DIPLOMACY

CHARLES HERBERT STOCKTON, LL.D.....In charge of Department  
BLAINE FREE MOORE, A.M.....Assistant Professor

*For Undergraduates and Graduates*

20. *Principles of International Law.*—A detailed course in the nature, sources and sanctions of International Law, including the usages and immunities of Diplomacy, the questions of treaties, the duties and practice of Consular officers and the history and organization of the Department of State. A series of lectures and assigned readings by the President, supplemented by case instructions by Assistant Professor MOORE. *Wed.*, at 5.00. President STOCKTON. *Mon., Fri.*, at 5.00. Assistant Professor MOORE.

*Third Section. Primarily for Graduates*

54. *Conflict of Laws or Private International Law.*—A course dealing with private law in its international aspects. Among the topics treated are marriage and divorce, guardianship, wills, and the administration of estates, bankruptcy, and foreign judgments. Open only to students who have had instruction in the fundamental subjects of American Law. Two hours. Professor GREGORY.

LATIN

See Classical Languages.

MATHEMATICS

HOWARD LINCOLN HODGKINS, Ph.D.....Professor  
ASAPH HALL, JR., Ph.D.....Professor  
H. GRANT HODGKINS, A.B.....Instructor  
WILLIAM WRIGHT FRASER, A.B., B.L.....Lecturer

*First Section. Primarily for Undergraduates*

3. *Solid Geometry; College Algebra; Plane Trigonometry.*—Mon., Wed., Fri., at 9.15. PROFESSOR HODGKINS.

4. *Algebra; Plane Trigonometry.*—Mon., Wed., Fri., at 5.00. Mr. HODGKINS.

6. *Solid Geometry; College Algebra; Plane Trigonometry.*—Mon., Wed., Fri., at 5.50. Mr. HODGKINS.

9. *Trigonometry; Analytic Geometry.*—Mon., Wed., Fri., at 10.15. PROFESSOR HODGKINS.

12. *Trigonometry; Analytic Geometry.*—Mon., Wed., Fri., at 5.50. PROFESSOR HODGKINS.

*Second Section. For Undergraduates and Graduates*

20. *Differential and Integral Calculus; Elements of differential Equations.* Tu., Th., Sat., at 5.00. PROFESSOR HODGKINS.

21. *Differential and Integral Calculus; Elements of differential equations.* Tu., Th., Sat., at 9.15. PROFESSOR HODGKINS.

*Third Section. Primarily for Graduates*

50. *Differential Equations.*—PROFESSOR HODGKINS.

58. *Celestial Mechanics.*—Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. PROFESSOR HALL.

59. *Vector Analysis.*—This course is designed to give the elements of an analysis based chiefly on the method of the late Professor Gibbs (of Yale), but extended so as to embrace the quaternion idea. Application is made to problems in both Geometry and Physics, including vector calculations applied to alternating currents. Mr. FRASER.

**MECHANICAL ENGINEERING**

See Engineering.

**METEOROLOGY**

WILLIS LUTHER MOORE, D.Sc., LL.D.....Professor  
WILLIAM JACKSON HUMPHREYS, Ph.D.....Professor

*Third Section. Primarily for Graduates*

50. *Applied Meteorology.*—Investigation of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. PROFESSOR MOORE.

51. *Meteorological Physics.* This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those wishing to make this their principal study will be assisted in

the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Professor HUMPHREYS.

### NAUTICAL SCIENCE

GEORGE WASHINGTON LITTLEHALES, C.E. .... Professor

#### *First Section. For Undergraduates*

1. *Nautical Science*.—Navigation; nautical astronomy; nautical almanac; production and use of nautical charts; tides; applications of meteorology and oceanography to navigation; theory and use of instruments of navigation. Professor LITTLEHALES.

#### *Third Section. For Graduates*

50. *Nautical Science*.—Special study of one or more topics. Conferences, assigned readings, direction of research. Professor LITTLEHALES.

### PHILOSOPHY AND PSYCHOLOGY

WILLIAM CARL RUEDIGER, Ph.D. .... Professor

EDWARD ELLIOTT RICHARDSON, Ph.D. .... Acting Professor

#### *First Section. Primarily for Undergraduates*

1. *General Psychology*.—An introductory study of the principal facts and laws of the mental life. *Mon., Fri.*, at 10.15. Professor RUEDIGER.

2. *General Psychology*.—Parallel with Course 1. *Mon., Fri.*, at 5.00. Professor RUEDIGER.

3. *Logic and Theory of Knowledge*.—Principles of deductive and inductive inference, followed by a study of the nature and structure of knowledge, its organization, and its relation to language. *Wed.*, at 10.15. Professor RUEDIGER.

4. *Logic and Theory of Knowledge*.—Parallel with Course 3. *Wed.*, at 5.00. Professor RUEDIGER.

(Courses 1 and 3, or 2 and 4 are planned to be taken together, but may be taken separately and are intended to satisfy the requirements in Psychology and Logic of Groups I to IV (pp. 70-71). They are introductory to the remaining courses in Philosophy and Education, and should be taken in the Sophomore year by students intending to pursue advanced courses or courses in Education.)

#### *Second Section. For Undergraduates and Graduates*

20. *History of Philosophy*.—The more important epochs in the history of thought. Attention is directed to the relation of these distinctive periods to the course of the world's progress. First half-year. *Mon., Wed., Fri.*, at 11.15. Professor RICHARDSON.



21. *Ethics*.—A historical and theoretical course, with the aim of acquainting the student with the principal ethical theories. Reference is made to the application of these theories to concrete conditions. Second half-year. *Mon., Wed., Fri.*, at 11.15. Professor RICHARDSON.

24. *History of Philosophy*.—The development of philosophy, its nature and problems. This course while introductory is designed to be comprehensive and to give the student a general survey of the philosophic field. *Tu., Th.*, at 5.00. Professor RICHARDSON.

25. *Experimental Psychology*.—An introductory laboratory course. Experiments on sensation, movement, effects of practice, memory and association, emotional manifestations, etc. This course may be taken parallel with Course 1 or 2. Professor RUEDIGER.

27. *Recent Philosophical Movements*.—A consideration of the various philosophical movements and tendencies of the immediate past. A critical study of the occasion and meaning of the trend of thought at the present time. Lectures and reading of recent books and periodicals. *Wed.*, at 5.00. Professor RICHARDSON.

28. *Philosophy of Nature*.—A critical examination of the concepts of physical science. An investigation of the significance of scientific laws and theories. One hour. Not given in 1913-14. Professor RICHARDSON.  
(Courses 24 and 25 are given in alternate years)

### *Third Section. Primarily for Graduates*

50. *Seminar in Psychology*.—Selected fundamental problems. Not given in 1913-14. Professor RUEDIGER.

51. *Metaphysics*.—The principles of metaphysics and the problems of philosophy. An advanced course tracing the origin and development of metaphysical questions, and a critical examination of the attempted solution of these problems. Readings, conferences and written reports. Professor RICHARDSON.

## PHYSICS

HOWARD LINCOLN HODGKINS, Ph.D.....	Professor
PERLEY GILMAN NUTTING, Ph.D.....	Assistant Professor
HAYNER HASKELL GORDON, Ph.D.....	Instructor
CHARLES EDWIN VAN ORSTRAND, S.M.....	Lecturer
HARVEY LINCOLN CURTIS, Ph.D.....	Lecturer

### *First Section. Primarily for Undergraduates*

1. *General Physics*.—A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has had a college course in trigonometry. *Mon., Wed., Fri.*, at 5.00 Professor HODGKINS.

2. *Laboratory Physics*.—A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.*, at 10.15 or *Tu., Th.*, at 7.30. Professor HODGKINS and Dr. GORDON.

3. *Introductory General Physics*.—A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.*, at 1.45. Professor HODGKINS.

*Second Section. For Undergraduates and Graduates*

21. *Heat*.—A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. Not given in 1913-14.

22. *Light*.—A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. Not given in 1913-14.

*Third Section. Primarily for Graduates*

55. *Spectroscopy*.—An experimental study of the flame, arc, spark, and vacuum tube spectra of the chemical elements; variations in spectra produced by varying excitation; spectra of mixed gases and alloys; identification of elements; photography of spectra. Assistant Professor NUTTING.

57. *Kinetic Theory*.—The physical properties of gases discussed from the standpoint of general dynamics. Free path phenomena including viscosity, diffusion, heat conduction, and molecular aggregation and dissociation. Jean's Dynamical Theory of Gases. A lecture and seminar course. *Mon.*, at 4.50. Mr. VAN ORSTRAND.

58. *Elasticity*.—The physical properties of solids as applied to problems in geophysics. The theories of homogeneous stress and strain. Potential energy of strained solids. Transmission of force. Propagation of earthquake waves. Love's Mathematical Theory of Elasticity.

A lecture and seminar course. *Mon.*, 4.50. Not given in 1912-13. Mr. VAN ORSTRAND.

59. *Theoretical Electricity*.—A lecture course on the Mathematical theory of Electricity, using J. J. Thomson's Elements of Electricity and Magnetism as a basis. The fundamental propositions of electrical theory are discussed, and their applications to practical problems are pointed out. The solution of a number of problems is also required. Dr. CURTIS.

POLITICAL SCIENCE

BLAINE FREE MOORE, A.M. . . . . Assistant Professor

*For Undergraduates and Graduates*

20. *Elements of Political Science*.—An introductory course in political science, dealing with the origin, nature, and functions of the State;

the fundamental political concepts such as the State, sovereignty, government, law; the forms of State; the forms of government; distribution of the powers of government. Recommended as a prerequisite for the succeeding courses. Text-book and assigned reading. First half-year. *Tu., Th., Sat.*, at 10.15. Assistant Professor MOORE.

21. *American Government*.—A general introductory course to American Government. The establishment of the Federal Constitution; a descriptive study and general survey of the national government and a more detailed study of the State and local governments. Lectures, text and assigned reading. First half-year. *Tu., Th., Sat.*, at 5.00. Assistant Professor MOORE.

22. *National Government*.—A continuation of the preceding course. A detailed study of the federal government taking up the executive, Congress and the judiciary. Lectures, text and assigned reading. Second half-year. *Tu., Th., Sat.*, at 5.00. Assistant Professor MOORE.

23. *Municipal Government in the United States*.—A study of the organization and administration of city government in the United States with a limited comparative study of European conditions. The growth of cities; their relation to the state; powers and liabilities of municipal corporations; municipal problems such as those relating to local transportation, police, light and water supply, municipal ownership of public utilities. Three hours, first half-year. *Mon., Wed., Fri.*, at 1.45. Assistant Professor MOORE. Not given in 1913-14.

25. *European Governments*.—A study of the organization and actual workings of the governments of France, Germany, Italy, Switzerland: a discussion of the executive, legislative, and judiciary and internal political conditions of each country. Lectures and assigned reading. Second half-year. *Tu., Th., Sat.*, at 10.15. Assistant Professor MOORE.

41. *Constitutional Law*.—A course dealing with the fundamental principles of constitutional law; a study of cases showing the relation between the federal and state governments; constitutional powers of the federal government; power and limitations of the states in regard to commerce, police, taxation, etc. Lectures and case book. Second half-year. *Wed., Fri.*, at 5.50. Assistant Professor MOORE.

### *Primarily for Graduates*

56. *Seminar in Political Science*.—Students competent to undertake advanced work are admitted to this seminar for the presentation and discussion of essays on topics belonging to the field of political science proper. Hours and credit to be arranged. Assistant Professor MOORE.

### PREVENTIVE MEDICINE

GEORGE MILLER STERNBERG, M.D., LL.D.....Professor

### *Third Section. Primarily for Graduates*

50. A seminar course dealing with vital statistics; etiology and prevention of infectious diseases; causes and prevention of infant mortality;



prevention of disease of occupation; protective inoculations; municipal hygiene; national and interstate preventive measures. Professor STERNBERG.

### ROMANCE LANGUAGES AND LITERATURES

GEORGE NEELY HENNING, A.M.....Professor  
WALTER EDGAR HANCOCK, A.B.....Assistant

#### French

##### *First Section. Primarily for Undergraduates*

1. *Grammar, Composition, Drill in Pronunciation*.—Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400–500 pages.) For beginners. *Mon., Wed., Fri.*, at 11.15. Professor HENNING.

2. Parallel with Course 1. Fraser and Squair's French Grammar. *Tu., Th. Sat.*, at 5.50. Professor HENNING.

3. *Translation Reading, Grammar, Composition*.—Fraser and Squair's French Grammar. Mérimée's *Carmen*; other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Mon., Wed., Fri.*, at 10.15. Professor HENNING.

4. Parallel with Course 3. Fraser and Squair's French Grammar. First text, Mérimée's *Carmen*; other texts to be announced. *Tu., Th., Sat.*, at 5. Professor HENNING.

6. *General Survey of French Literature, Nineteenth to Seventeenth Centuries*.—Translation, collateral reading and reports thereon, lectures on literature and the history of the language composition. Open to students who have passed in Course 3 or 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.*, at 3.45. Professor HENNING.

##### *Second Section. For Undergraduates and Graduates*

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. *Seventeenth Century Literature*.—History, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, Saint-Simon, Mme de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Not given in 1913–14.

26. *Literature of the First Half of the Nineteenth Century*.—History, criticism, travels, fiction, drama, lyric poetry. Balzac, Baudelaire, Chateaubriand, Gautier, Hugo, Lamartine, Michelet, Musset, Sainte-Beuve, George Sand, Thierry, Vigny, etc. Translation, collateral reading and reports thereon, lectures on literature and history. *Mon., Wed., Fri.*, at 2.45. Professor HENNING.



28. *Literature of the Second Half of the Nineteenth Century*.—History, philosophy, criticism, fiction, drama, lyric poetry. Augier, Brunetière, Daudet, Dumas fils, Flaubert, France, Heredia, Leconte de Lisle, Lemaître, Loti, Maiterlinck, Renan, Rostand, Sully Prudhomme, Taine, Verlaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Not given in 1913-14.

*Third Section. Primarily for Graduates*

57. *The Comedies of Molière*.—Professor HENNING.

60. *The Romantic Movement in France, with some reference to the same movement in England and Germany*. Professor HENNING.

Other courses may be arranged for competent graduates.

**Spanish**

*First Section. Primarily for Undergraduates*

1. *Grammar, Composition*.—Hills and Ford's Spanish Grammar. Translations and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. *Mon., Wed., Fri.*, at 5.00. Mr. HANCOCK.

2. *Translation of Modern Prose and Poetry*.—With much collateral reading. *Mon., Wed., Fri.*, at 4.00. Mr. HANCOCK.

**ZOOLOGY**

See Biological Science.

## PROFESSIONAL DEPARTMENTS

### DEPARTMENT OF LAW

#### FACULTY

CHARLES HERBERT STOCKTON, LL.D.....	PRESIDENT OF THE UNIVERSITY
CHARLES NOBLE GREGORY, A.M., LL.D.....	Dean and Professor of Law
MELVILLE CHURCH, LL.M.....	Professor of the Law of Patents
WALTER COLLINS CLEPHANE, LL.M.....	Professor of Law
EDWIN CHARLES BRANDENBURG, LL.M.....	Professor of Law
ARTHUR PETER, LL.B.....	Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....	Professor of Law
WENDELL PHILLIPS STAFFORD, A.M., LL.D.....	Professor of Law
JOHN WILMER LATIMER, LL.B.....	Assistant Professor of Law
EVERETT FRASER, A.B., LL.B.....	Assistant Professor of Law
HENRY CRAIG JONES, A.B., LL.B.....	Assistant Professor of Law
MERTON LEROY FERSON, A.M., LL.B.....	Assistant Professor of Law
ALFRED BUHRMAN,.....	Clerk of the Moot Court
WILLIAM CABELL VAN VLECK, A.B., LL.B.,	
Secretary of the Department of Law and Instructor in Law	

#### COURT OF APPEALS

WILLIAM F. MATTINGLY, LL.D.....	Chief Justice
JOHN BELL LARNER, LL.D.....	Associate Justice
STANTON JUDKINS PEELE, LL.D.....	Associate Justice

#### LIBRARY

ULYSSES WAYNE WRIGHT, A.B.....	Assistant Librarian
NEAL BRADFORD SPAHR, A.B.....	Assistant Librarian

#### GENERAL STATEMENT

This Department, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was in 1898, in accordance with the recommendation of the American Bar Association, increased to three years. Since 1903 most of the important topics of substantive law have been under the charge of trained professional teachers giving their whole time to the work of legal instruction. Those branches of the law connected with practice are under the charge of professors who are actively engaged in the administration of the law either at the bar or on the bench.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered. A special course in Patent Law was added in 1895.

In 1900 the Law Department was one of the group of law schools which organized the Association of American Law Schools, and it has remained a member of this Association since that time. This Association includes forty-three of the best and most progressive law schools of the country and is committed to the policy of advancement in legal education.

#### THE ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW

To students of law, the peculiar advantages of Washington are manifest. The Supreme Court of the United States is in session during practically the entire school year. Students have the rare opportunity of hearing the arguments presented by leading American lawyers and the decisions of this high tribunal, which are delivered orally each Monday, upon the important legal questions which come before that court for final determination. Congress is in session during the winter, and here students see the practical workings of the largest and most important law-making body. The Department of Justice, the legal branch of the Federal Government, is also located in Washington. Besides the above there are also the United States Court of Claims, the United States Court of Customs Appeals, the United States Commerce Court, and the various local courts of the District of Columbia. The last-named courts exercise the unusual dual function of State and Federal courts. By means of attendance upon these courts students may familiarize themselves with all branches of legal procedure.

#### HOURS FOR LECTURES

The hours of instruction are 7.50-8.40 a.m., 9.00 a.m.-12.00 m., and 4.50-6.30 p.m. Many of the courses are duplicated, so that a student may, if he so desires, confine his work largely either to the forenoon or to the afternoon. Students who desire, or are compelled by circumstances, to support themselves by employment in the Government Service or elsewhere, or who desire to obtain practical experience in an attorney's office in addition to their work in law school, will find this arrangement of hours especially desirable. Such students may complete the full course for the degree, confining their attendance entirely from 4.50-6.30 p.m., or attending partly from 7.50-8.40 a.m. and partly from 4.50-6.30 p.m.

#### LOCATION

The Department of Law occupies the entire fifth and sixth floors of the New Masonic Temple, corner of New York Avenue, Thirteenth and H Streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious lecture rooms, moot court rooms, offices, the law library, and a students room.

## ACADEMIC YEAR

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the Wednesday following the Wednesday nearest the first day of June, and is divided into two half-years, the second half-year beginning in 1913-14 on the second day of February. The session of 1913-14 begins on Wednesday, September 24, and closes Wednesday, June 10. Courses are so arranged that it is possible for a student to enter at the beginning of the second semester of any year and be graduated three years from that time, receiving his degree at the Winter Convocation, held on or about February 22 of each year.

Students who apply for registration not later than two months from the close of registration or students absent for unavoidable cause for not exceeding two months may remove the condition in attendance by study for a period of one and one-half times the period of the absence, under a practitioner during such time as the Department of Law is not in session, proof thereof to be made by affidavit of the practitioner.

## ADMISSION

1. *For the Degree of Bachelor of Laws.*—Applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must, in conformity with the requirements of the Association of American Law Schools, of which this school is a member, have either of the following qualifications: (1) They must have completed a four years course in an approved high school. (2) They must have educational training sufficient to satisfy the entrance requirements of Columbian College of the University. In order to satisfy the latter requirements, students must present credits aggregating 15 units, which are broadly equivalent to a four years high school course. A unit represents approximately one year's study in a subject in a preparatory or high school. The fifteen units must include English 3 units, Mathematics  $2\frac{1}{2}$  units, and 2 units of one of the following languages: Latin, Greek, French, German or Spanish. The remaining  $7\frac{1}{2}$  units are elective. Units may be satisfied in general as follows:

## English, 3 units

Requirements recommended by the Conference on Uniform Entrance Requirements in English, February 22, 1909, in Grammar, Composition and Literature.

## Latin

Elementary, 2 units  
Grammar and Composition  
Caesar  
Advanced, 2 units  
Cicero  
Virgil  
Prose Composition

## Greek

Elementary, 2 units  
Grammar and Composition  
Xenophon  
Advanced, 1 unit  
Homer



## French

Elementary, 2 units

Advanced, 2 units

## Spanish

Elementary, 2 units

## German

Elementary, 2 units

Advanced, 2 units

## History

Ancient, 1 unit

Greek and Roman

Mediaeval and Modern

European, 1 unit

English, 1 unit

American and Civil Government, 1 unit

## Mathematics

## a. Algebra

Elementary, 1 unit

Intermediate,  $\frac{1}{2}$  unitAdvanced,  $\frac{1}{2}$  unit

## b. Plane Geometry, 1 unit

c. Solid Geometry,  $\frac{1}{2}$  unitd. Plane Trigonometry,  $\frac{1}{2}$  unit

## Physics, 1 unit

Recitations and Laboratory work

## Chemistry, 1 unit

Recitations and Laboratory work

Other subjects which will be accepted on the basis of one unit for a year's work are botany, zoology, physiology, physiography, political economy and other accredited high school subjects.

## Manual Training High School subjects:

Shopwork, not exceeding 2 units

Domestic Science, not exceeding 2 units

Domestic Arts, not exceeding 2 units

## Business High School subjects:

Accounting and Finance, 1 unit

## Bookkeeping, 2 units

Business Organization, 1 unit

Commercial Law, 1 unit

Government and Industrial Problems,  $\frac{1}{2}$  unitCommercial History,  $\frac{1}{2}$  unitCommercial and Physical Geography,  $\frac{1}{2}$  unit

Applicants for admission on certificate should secure formal certificates setting forth the credits claimed, and present these certificates attached to their application forms. All applications for admission should be addressed to the Secretary of the Department of Law, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

2. *For the Degree of Master of Laws or Master of Patent Law.*—Candidates for these degrees must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

3. *Special Students*.—Persons who for any reason do not qualify as candidates for a degree may, with the assent of the professors whose courses they elect to take, be admitted as special students.

4. *Auditors*.—Persons are allowed to register and to attend classes as auditors for the regular tuition fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance only.

#### ADVANCED STANDING

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting a certificate from any law school of accredited standing showing that the student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after the student has shown that he has pursued a course of study in a law school in the subjects upon which he is examined, covering at least as many hours as are required for such subjects in this University. No credit is given for study pursued in a law office, except as explained above under the statement as to the Academic Year.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

#### CREDIT GIVEN BY OTHER SCHOOLS FOR WORK DONE

Because of the fact that the Law Department is a member of the Association of American Law Schools the work certified by it is given a maximum of credit by the other law schools of the country both as to time and, as far as the authorities of this school have been able to ascertain, as to subjects. This enables students who, for any reason, are unable to complete their work in Washington to continue it at other institutions with a minimum loss of time and work.

#### METHOD OF INSTRUCTION

Instruction in subjects of substantive law is based mainly upon the study and discussion of cases.

In the discussions in the class room every effort is made to lead the student to a clear understanding of fundamental legal principles and to afford him scientific training in the best method of study and legal reasoning.

These courses are given mainly by members of the law faculty who give their entire time to the Law School and are in daily attendance.

Subjects involving the adjective law are taught by lectures, study of text-books and cases, and by practical work in pleading, drafting and the trial of moot cases. These courses are in charge of experienced members of the bar in active practice.

**COMBINED SIX-YEAR COURSE FOR THE DEGREES OF BACHELOR OF ARTS  
AND BACHELOR OF LAWS**

Regular students in this course will complete three years of work aggregating forty-five hours in Columbian College, including one of the four groups of prescribed subjects, and will complete in the Department of Law the three-year course for the degree of Bachelor of Laws. On the completion of the prescribed forty-five hours of work in Columbian College and the first year of the regular course in Law, the student will receive the degree of Bachelor of Arts.

**COURSES OF INSTRUCTION****A. Leading to the Degree of Bachelor of Laws**

The course of instruction leading to the degree of Bachelor of Laws extends through a period of at least three years. An average of twelve hours class work per week for three years is required of all candidates for this degree.

Students devoting their whole time to the study of law may, with the permission of the Dean, select additional subjects from the second and third years, provided the aggregate of the hours taken does not exceed fifteen a week. Such excess credits may be applied toward the degree of Master of Laws or of Master of Patent Law.

Students not devoting their whole time to the study of law are urged to devote more than three years to the completion of the course. Many students find it more satisfactory to do so. In case of unsatisfactory work students are required so to extend the period of study.

**FIRST YEAR SUBJECTS***First Semester*

*\*Contracts (A).*—Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

*Criminal Law and Procedure.*—Professor EARNEST. Three hours a week. Clark's Criminal Law and Mikell's Cases on Criminal Law. Clark's Criminal Procedure and selected cases.

*Domestic Relations.*—Mr. VAN VLECK. Two hours a week. Kales' Cases on Persons.

*\*Property I (A).*—Assistant Professor FRASER. Two hours a week. Gray's Cases on Property, Volume I.

*\*Torts (A).*—Assistant Professor JONES. Two hours a week. Ames & Smith's Cases on Torts. Vol. I, Third Edition; Vol. II, Second Edition.

*Second Semester*

*Agency.*—Assistant Professor FERSON. Three hours a week. Wambaugh's Cases on Agency.

*\* Required Subjects.*

\**Contracts* (B).—Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

\**Property I* (B).—Assistant Professor FRASER. Four hours a week. Gray's Cases on Property, Vols. I and II.

\**Torts* (B).—Assistant Professor JONES. Two hours a week. Ames & Smith's Cases on Torts. Vol. I, Third Edition; Vol. II, Second Edition.

## SECOND YEAR SUBJECTS

### *First Semester*

\**Common Law Pleading and Practice*.—Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

\**Equity* (A).—Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

\**Evidence* (A).—Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

*Insurance*.—Assistant Professor FRASER. Two hours a week. Wambaugh's Cases on Insurance. (Given in 1913-14 and in alternate years thereafter.)

*Municipal Corporations*.—Assistant Professor JONES. Two hours a week. Beale's Cases on Municipal Corporations. (Not given in 1913-14 and in alternate years thereafter.)

\**Property II* (A).—Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Vols. II and III.

*Sales*.—Assistant Professor FERSON. Three hours a week. Williston's Cases on Sales. Second Edition.

### *Second Semester*

*Brief Making*.—Assistant Professor LATIMER. One hour a week.

*Damages*.—Assistant Professor JONES. Two hours a week. Beale's Cases on Damages. (Given in 1913-14 and in alternate years thereafter.)

\**Equity* (B).—Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

*Equity Pleading and Practice*.—Professor CLEPHANE. One hour a week. Text-book to be announced.

\**Evidence* (B).—Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

*Partnership*.—Mr. VAN VLECK. Two hours a week. Gilmore's Cases on Partnership. (Not given in 1913-14 and in alternate years thereafter.)

\**Property II* (B).—Assistant Professor FRASER. Three hours a week. Gray's Cases on Property, Vol. V.

*Public Service Companies*.—Assistant Professor JONES. Two hours a week. Wyman's Cases on Public Service Companies. Second edition. (Not given in 1913-14 and in alternate years thereafter.)

\* Required Subjects.



*Quasi-Contracts*.—Mr. VAN VLECK. Two hours a week. Scott's Cases on Quasi-Contracts. (Given in 1913-14 and in alternate years thereafter.)

### THIRD YEAR SUBJECTS

#### *First Semester*

*Bankruptcy*.—Professor BRANDENBURG. One hour a week.

\**Bills and Notes*.—Assistant Professor FERSON. Three hours a week. Huffcutt's Negotiable Instruments. Statutes, Cases and Authorities. Second Edition.

*Conflict of Laws (A)*.—Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

\**Moot Court*.—Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

*Patent Law (A)*.—Professor CHURCH. Two hours a week.

*Preparation of Legal Instruments*.—Assistant Professor LATIMER. One hour a week.

\**Private Corporations (A)*.—Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

*Suretyship*.—Assistant Professor JONES. Two hours a week. Ames' Cases on Suretyship.

#### *Second Semester*

*Conflict of Laws (B)*.—Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

*Constitutional Law*.—Assistant Professor FRASER. Two hours a week. Case book to be announced. (Not given in 1913-14 and in alternate years thereafter).

*Federal Procedure*.—Professor BRANDENBURG. One hour a week.

*Legal Tactics and Ethics*.—Professor CLEPHANE. One hour a week.

\**Moot Court*.—Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

*Organization and Management of Corporations*.—Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

*Patent Law (B)*.—Professor CHURCH. Two hours a week.

\**Private Corporations (B)*.—Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

*Trusts*.—Assistant Professor FERSON. Three hours a week. Ames' Cases on Trusts.

*Wills and Administration*.—Professor PETER. One hour a week.

Second and third year subjects, not required and given in alternate years, are open to both second and third year students.

\* Required Subjects.

**B. Leading to the Degree of Master of Laws**

Students admitted as candidates for the degree of Master of Laws are required to elect subjects, not previously taken covering a minimum of ten hours a week. These may be freely elected from the subjects offered by the Faculty of Law and from International Law given in Columbian College.

Any excess credits obtained in this Law School in the course leading to the degree of Bachelor of Laws may be applied toward the Master's degree. The degree of Master of Laws will not be conferred, however, until one year after the receipt of the Bachelor's degree.

*Advanced Practice.*—Candidates for the Master's degree may also elect advanced practice work in the Moot Court, receiving therefor a credit of two hours for the year.

**C. Leading to the Degree of Master of Patent Law**

A candidate who has successfully completed the requirements prescribed for the degree of Master of Laws, if he has duly completed and received credit for the courses in Patent Law and Federal Procedure, may elect to become a candidate for the degree of Master of Patent Law instead, and that degree may be conferred upon him, but the above mentioned topics shall be counted only toward one degree, and shall not be available for the degree in Patent Law, if they have been counted toward any other degree.

**COURSE IN PATENT LAW**

A special course in Patent Law and Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week.

This course may be elected and counted by students toward the degree of Bachelor of Laws, and such students will be required to take only the first semester of the regular moot court work. A certificate, under the seal of the University, is granted to all students who complete this course.

**COURSES IN PRACTICE****A. Moot Court Work**

1. *For the Degree of Bachelor of Laws.*—Particular stress is laid upon moot court work. Aside from the practice court connected with the course in Patent Law, there are four courts in which undergraduate students pursue their work. Three of these are *nisi prius* courts and are presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court is composed of the ex-Chief Justice of the United States Court of Claims and of members of the Washington Bar.

Every third-year student, before receiving the Bachelor's degree, is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius* courts, with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third year student in active participation in moot court work in the court room to which he is assigned. Students electing Patent Law will be required, in view of the special moot court work in that course, to take only the first half-year of the regular moot court work.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judgment or decree, after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. *For the Degree of Master of Laws.*—The same facilities for moot court work as are described above are afforded in the course leading to the degree of Master of Laws. In this course, however, the nature of the cases assigned is somewhat different, involving, in addition to the ordinary cases at common law or in equity, cases of a special character, such as habeas corpus, certiorari, quo warranto, injunction, mandamus, extradition, replevin, attachment, etc. All candidates for this degree taking moot court work are required to carry through the appellate court each case assigned to them.

3. *Officers and Equipment.*—The clerk of the Moot Court is one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of practice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, and counsel tables, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court room.

A careful record is kept of the work of each student, both as to his



pleadings and his conduct of the case in court, and the ratings thus given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

#### **B. Brief Making**

In view of the rapidly increasing bulk of our case law, it becomes absolutely indispensable that students should be taught to find authorities in point, to collate them, and to present them to the court in a clear and concise form. In order to afford this training a course in Brief Making is given. This course will be conducted in part in the Library of the Department of Law, so that the use of the digests and reports may be illustrated.

#### **C. Preparation of Legal Instruments**

Students are instructed in this course in the actual preparation of deeds, mortgages, wills, assignments, contracts, partnership agreements, and other legal instruments which a lawyer is called upon to prepare. Statements of facts are furnished to the class by the professor in charge, and each student is required to prepare the various forms of instruments. These are corrected by the professor and are discussed and criticised in class. Careful consideration is given to special forms of execution and acknowledgment when one of the parties to the instrument is a corporation, a partnership, a married woman, and the like.

#### **D. Legal Tactics and Ethics**

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course is given. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given upon the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of starting in practice and opening and furnishing an office, with suggestions as to office systems.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, and conducting the argument on appeal, including the use of authorities in court. The Canons of Professional Ethics adopted by the American Bar Association are studied in this course. Practical instruction in Extraordinary Legal Remedies constitutes a part of this course.



## EXAMINATION AND GRADES

*Regular Examinations.*—Written examinations are held at the close of each semester. These examinations are final as to the work of that semester. All students, unless specially excused by the Dean, are required to take the regular examinations in the subjects pursued.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

*Grades.*—At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, *excellent, good, satisfactory, fair, conditioned, and failed.*

*Conditions and Failures.*—A student receiving the grade of F (failed) in any subject will be required to repeat the subject.

A student receiving the grade of E (conditioned) in any subject will be required to repeat that subject unless he pass the *next* regular examination for removal of conditions with a grade of at least C.

Regular examinations for the removal of conditions are held during the first week of each academic year. Application for permission to take these examinations must be made in writing to the Secretary of the Department of Law not later than three days before the date for which the examination is scheduled. Special examinations for the removal of conditions are held at the end of each academic year for the benefit of candidates for the Bachelor's degree, who have been conditioned in not more than six semester hours during their last year.

The instructors of the first year class are a committee to pass on the eligibility of a student to re-register, with power to warn for deficiency, and to refuse re-registration to any student whose work is deemed unsatisfactory.

*Special Examinations.*—No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

*Attendance.*—Regular attendance is required in all courses; and the examination grade of any student in any course may be withheld and the passing of another examination or the repetition of the course may be required on the sole ground of unsatisfactory attendance.

*Election of Courses.*—No student shall be allowed to register in courses aggregating more than fifteen hours during any one semester without first obtaining the permission of the Faculty.

Every student who is a candidate for graduation with the degree of Bachelor of Laws in his third year shall take and pass in each semester of this third year courses aggregating ten hours.

Election of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

## DEGREES

1. *Bachelor of Laws*.—The degree of Bachelor of Laws will be conferred upon students who have studied law for a period of at least three years and passed satisfactory examinations upon subjects aggregating thirty-six year hours, and whose attendance and conduct have been satisfactory to the Faculty. The degree will not be conferred upon students deficient in Bills and Notes, Common Law Pleading and Practice, Contracts, Corporations, Equity, Evidence, Moot Court, Property I and II and Torts.

The degree of Bachelor of Laws *with distinction* will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. *Master of Laws or Master of Patent Law*.—The degree of Master of Laws or Master of Patent Law will be conferred upon students who have completed the work prescribed for these degrees with the grade of C or better, and whose attendance and conduct have been satisfactory to the Faculty.

## LAW LIBRARY AND READING-ROOM

A well-equipped working library, comprising about 6,000 volumes, is open to the students from 8.30 a.m. to 10.00 p.m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The library contains the complete decisions of the highest courts of thirty-four states and the District of Columbia, the complete reports of the United States Supreme Court and the other Federal courts, the complete National Reporter System, the Century, Decennial and American Digests, the various encyclopaedias of law, the Lawyers Reports Annotated, the American Decisions, American Reports and American State Reports, the English Common Law and Chancery Reports, the English Reprints, the Law Journal Reports since 1865, and about eight hundred standard text-books, and legal periodicals.

In addition to these facilities, the students have free access to the Congressional Library, and other public libraries.

## PRIZES

*The Ordranax Prize Scholarship*.—A prize scholarship, known as "The Ordranax Prize Scholarship," is awarded to that member of the Second Year Class taking the regular course, who shall during his first and second years attain the highest average grade. In determining the average grade of contestants the grade received in each subject shall be multiplied by the number of hours given to such subject and the sum of the results divided by the total number of hours. The recipient of this prize scholarship shall be entitled to receive credit for tuition fees to the extent of ten hours' work in his third year. Library and diploma

fees will remain payable. The award of this scholarship is purely personal and will not be commuted to a cash payment, nor will it be transferable. The recipient of the scholarship must make use of the scholarship during the session next succeeding its award; otherwise, the same shall be awarded, upon like conditions, to the person having the next highest grade. This scholarship, for the session 1912-13 was awarded to Burr Shearer Stottle.

*Ellsworth Prize.*—A prize of twenty-five dollars in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a regular student in the Patent Law Course. Awarded in 1912 to Horace Greeley Macfarland.

*Phi Delta Phi Prize.*—The Marshall Chapter of Phi Delta Phi Fraternity, which is the local chapter, has offered a prize of twenty-five dollars cash, to be awarded to that member of the first year class taking the regular course, who shall attain the highest average grade, the grade to be determined in the same manner as the Ordranax Prize. Awarded in 1912 to Merrell Edward Clark.

*American Law Book Company Prize.*—A prize, offered by the American Law Book Company, of the Students Edition of "Cyc" in twelve volumes is awarded each year to the student of the Department of Law, graduating in the entire course for the LL.B. degree, with the highest scholastic standing for the entire course. This highest standing is ascertained in the same manner as the Ordranax Prize. This prize is to be awarded at Commencement. It is offered this year for the first time.

#### PUBLIC SPEAKING AND DEBATING

Excellent facilities for training in the art of public speaking are afforded by the two debating societies which have been organized in the Department of Law. These societies, known as the Columbian and Needham Debating Societies, meet weekly for debate. Membership in these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises.

Intercollegiate debates are also held. Membership on the teams which represent the University in these contests must be won in preliminary contests held for such purpose. These debates are conducted under the supervision of a committee of the University Faculty.

#### ADMISSION TO THE BAR

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Department of Law of the University is regarded as discharging this requirement. Its work is also accepted as fulfilling the requirements for preliminary law study in substantially all of the other jurisdictions of the United States.

## FEES

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	3
3. Tuition fee per annum for each hour taken per week...	10
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms.....	2
5. Fee for graduation.....	10
6. Fee for a certificate under the seal of the University....	2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year. Auditors are not charged matriculation and library fees.

## PAYMENT OF FEES

Matriculation, library and other special fees are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. Fees are payable at the office of the Treasurer of the University, 2024 G Street, or of the Secretary of the Department of Law.

## BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY OF THE DEPARTMENT OF LAW,  
The George Washington University,  
New Masonic Temple, Washington, D. C.



## DEPARTMENT OF MEDICINE

### FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY  
WILLIAM CLINE BORDEN, M.D.....Dean, and Professor of Surgery  
J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus  
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,

Dean Emeritus, and Professor of Obstetrics

GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine

HENRY CRÈCY YARROW, M.D.....Professor of Dermatology

DANIEL KERFOOT SHUTE, A.B., M.D.,

Professor Neuro-Anatomy and Clinical Professor of Ophthalmology

STERLING RUFFIN, M.D.....Professor of Medicine

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor of Chemistry

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology

JOHN WESLEY BOVÉE, M.D.....Professor of Gynecology

THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine

AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery

RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology

FRANCIS RANDALL HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence

ALBERT LIVINGSTON STAVELY, M.D., Clinical Professor of Dermatology

WILLIAM ALANSON WHITE, M.D.,

Professor of Psychiatry and Clinical Professor of Neurology

ARTHUR AUGUSTIN SNYDER, M.D.....Clinical Professor of Surgery

SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology

JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery

DANIEL WEBSTER PRENTISS, M.D.....Professor of Hygiene

WILLIAM KENNEDY BUTLER, M.D.....Professor of Ophthalmology

FREDERICK FULLER RUSSELL, M.D.,

Professor of Pathology and Bacteriology

BUCKNER MCGILL RANDOLPH, M.D.,

Professor of Materia Medica and Therapeutics

LUTHER HALSEY REICHELDERFER, M.D., Clinical Professor of Surgery

JAMES DUDLEY MORGAN, M.D.,

Clinical and Associate Professor of Medicine

LOUIS ANATOLE LAGARDE, M.D.....Professor of Military Surgery

MONTGOMERY EARL HIGGINS, M.D.....Professor of Tropical Diseases

GIDEON BROWN MILLER, S.B., M.D...Clinical Professor of Gynecology

MATTHEW KOLLIG, A.B., M.D.....Professor of Anatomy

JULIAN MAYO CABELL, M.D.,.....Clinical Professor of Obstetrics

OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology  
and Associate Professor of Anatomy

NOBLE PRICE BARNES, M.D., . . . Associate Professor of Materia Medica  
and Therapeutics, and Clinical Associate in Medicine  
HURON WILLIS LAWSON, S.M., M.D. . . Associate Professor of Obstetrics  
FRANK ADELBERT HORNADAY, S.B., M.D.,

Associate Professor of Chemistry

JOHN BENJAMIN NICHOLS, M.D., . . . Associate in Medicine and Dietetics  
CHARLES STANLEY WHITE, M.D. . . . . Associate in Surgery  
HARRY HAMPTON DONNALLY, A.M., M.D.,

Associate in Medicine and Clinical Associate in Pediatrics

WILLIAM FRANCIS MATTINGLY SOWERS, M.D. . . . . Associate in Surgery  
HENRY RANDALL ELLIOTT, M.D.,

Associate in Physiology and Pharmacology

EDGAR PASQUAL COPELAND, M.D. . . . . Clinical Associate in Pediatrics  
JOHN T. KELLEY, M.D. . . . . Clinical Associate in Obstetrics  
WALTER ASHBY FRANKLAND, M.D. . . . . Clinical Associate in Medicine  
J. LEWIS RIGGLES, M.D. . . . . Associate in Anatomy and Gynecology  
WALTER WATKINS WILKINSON, M.D. . . . . Associate in Morbid Anatomy  
FRANK LEECH, M.D. . . . . Clinical Associate in Pediatrics  
WILLIAM CABELL MOORE, M.D. . . . . Associate in Physical Diagnosis  
CHARLES AUGUSTUS SIMPSON, M.D. . . . . Associate in Dermatology  
JOHN BRADFORD BRIGGS, S.B., M.D.,

Associate in Bacteriology and Pathology

EDWARD GRANT SEIBERT, M.D.,

Instructor in Laryngology and Ophthalmology

WALTER HIBBARD MERRILL, M.D. . . . Instructor in Electro-Therapeutics  
OSCAR ADDISON MACK McKIMMIE, M.D.,

Instructor in Laryngology and Otology

HOBART SOUTHWORTH DYE, M.D.,

Instructor in Laryngology and Otology

TRUMAN ABBE, M.D. . . . . Instructor in Genito-Urinary Surgery  
JOSEPH LAWN THOMPSON, M.D. . . . . Instructor in Medicine  
VIRGIL B. JACKSON, M.D. . . . . Instructor in Gynecology  
EDMUND THOMAS MURDAUGH FRANKLIN, M.D. . . . Instructor in Surgery  
WILLIAM J. FRENCH, M.D. . . . . Instructor in Pediatrics  
ARTHUR LeROY HUNT, M.D. . . . . Instructor in Anaesthesia  
CHARLES WILBUR HYDE, M.D., Instructor in Medicine and Anaesthesia  
ADAM KEMBLE, M.D. . . . . Instructor in Genito-Urinary Surgery  
HOMER GIFFORD FULLER, M.D. . . . Instructor in Genito-Urinary Surgery  
CLINE CHIPMAN, M.D. . . . . Instructor in Anaesthesia  
GEORGE HENRY SCHWINN, M.D., Instructor in Psychiatry and Neurology  
BENJAMIN RUSH LOGIE, M.D. . . . . Instructor in Neurology  
ALBERT PERKINS TIBBETS, M.D. . . . . Instructor in Anatomy  
COURSEN BAXTER CONKLIN, M.D. . . . . Instructor in Medicine  
ALEXANDER YELVERTON PEYTON GARNETT, M.D.,

Instructor in Obstetrics

HARRY HYLAND KERR, M.D. . . . . Instructor in Operative Surgery  
WILLIAM JOHNSTON MALLORY, M.D. . . . . Instructor in Medicine

ELIJAH WHITE TITUS, Phar.D.,M.D.,	
Instructor in Physiology, Pharmacology and Obstetrics	
FRANCIS MERRIAM BARNES, Jr., M.D.,	
Instructor in Psychiatry and Neurology	
RALPH MICHAEL LE COMTE, M.D.,	
Instructor in Pathology and Bacteriology	
CARL LAWRENCE DAVIS, M.D.....	Instructor in Anatomy
DANIEL LERAY BORDEN, M.D... ..	Instructor in Surgery and Gynecology
WALTER DUVAL WEBB, M.D.....	Instructor in Surgery
ALBERT ELWOOD PAGAN, M.D.....	Instructor in Gynecology

#### THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY

##### Hospital

STERLING RUFFIN, M.D.....	Physician-in-Chief
GEORGE NICHOLAS ACKER, M.D.....	Associate Physician
HARRY HAMPTON DONNALLY, M.D.....	Associate Physician
BUCKNER MCGILL RANDOLPH, M.D.....	Associate Physician
WILLIAM CLINE BORDEN, M.D.....	Surgeon-in-Chief
JOHN RYDER WELLINGTON, M.D.....	Associate Surgeon
CHARLES STANLEY WHITE, M.D.....	Associate Surgeon
WILLIAM FRANCIS MATTINGLY SOWERS, M.D.....	Associate Surgeon
AURELIUS RIVES SHANDS, M.D.....	Orthopedic Surgeon
FRANCIS RANDALL HAGNER, M. D.....	Genito-Urinary Surgeon
HENRY RANDALL ELLIOTT, M.D.....	Associate Genito-Urinary Surgeon
HOMER GIFFORD FULLER, M.D.....	Associate Genito-Urinary Surgeon
JOHN WESLEY BOVÉE, M.D.....	Gynecologist-in-Chief
GIDEON BROWN MILLER, S.B.,M.D.....	Associate Gynecologist
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,	
	Obstetrician-in-Chief
HURON WILLIS LAWSON, M.D.....	Associate Obstetrician-in-Chief
ELIJAH WHITE TITUS, M.D.....	Assistant Obstetrician
GEORGE NICHOLAS ACKER, M.D.....	Pediatrician-in-Chief
EDGAR PASQUAL COPELAND, M.D.....	Associate Pediatrician
HENRY CRÈCY YARROW, M.D.....	Dermatologist-in-Chief
RANDOLPH BRYAN CARMICHAEL, M.D.....	Associate Dermatologist
CHARLES WILLIAMSON RICHARDSON, M.D.....	Laryngologist
DANIEL KERFOOT SHUTE, M.D.....	Ophthalmologist
WILLIAM KENNEDY BUTLER, M.D.....	Ophthalmologist
EDWARD GRANT SIEBERT, M.D.,	
	Associate Laryngologist and Ophthalmologist
WALTER HIBBARD MERRILL, M.D.....	Radiographer
FREDERICK FULLER RUSSELL, M.D.....	Pathologist-in-Chief
FRANK ADELBERT HORNADAY, M.D.,	Director of the Clinical Laboratory
JOHN BRADFORD BRIGGS, M.D.....	Associate Pathologist
RALPH MICHELL LE COMTE, M.D.....	Assistant Pathologist

CHARLES WILBUR HYDE, M.D.....	Anaesthetist
ARTHUR LeROY HUNT, M.D.....	Anaesthetist
CLINE CHIPMAN, M.D.....	Anaesthetist
WILLIAM LAWRENCE VAN SANT, M.D.....	Resident Physician
JOHN ADOLPH ROLLINGS, M.D.....	Assistant Resident Physician
J. IRVING SLOAT, M.D.....	Assistant Resident Physician
LOUIS ANATOLE LaGARDE, JR., M.D.....	Assistant Resident Physician
FRANK M. CERVONN, A.B. Phar.D.....	Pharmacist
MARY WINIFRED GLASCOCK, B.N.	Superintendent of Nurses and Principal of the Training School for Nurses.
JOHN BRUCE COPPING.....	Superintendent of the Hospital

#### Dispensary

ALBERT FREEMAN AFRICANUS KING, M.D.....	Obstetrician-in-Chief
STERLING RUFFIN, M.D.....	Physician-in-Chief
JOHN WESLEY BOVÉE, M.D.....	Gynecologist-in-Chief
WILLIAM CLINE BORDEN, M.D.....	Surgeon-in-Chief
BENJAMIN RUSH LOGIE, M.D.....	Director of the Dispensary
WILLIAM CABELL MOORE, M.D....	Assistant Director of the Dispensary

#### General Medicine

BUCKNER MCGILL RANDOLPH, M.D.....	Attending Surgeon
WALTER ASHBY FRANKLAND, M.D.....	Attending Surgeon
WILLIAM CABELL MOORE, M.D.....	Attending Surgeon
COURSEN BAXTER CONKLIN, M.D.....	Attending Surgeon
WILLIAM JOHNSTON MALLORY, M.D.....	Attending Surgeon
JOSEPH LAWN THOMPSON, M.D.....	Attending Surgeon

#### General Surgery

ARTHUR LeROY HUNT, M.D.....	Attending Surgeon
TRUMAN ABBE, M.D.....	Attending Surgeon
EDMUND THOMAS MURDAUGH FRANKLIN, M.D.....	Attending Surgeon
JOHN POTTS FILLEBROWN, M.D.....	Attending Surgeon
WALTER DUVALL WEBB, M.D.....	Attending Surgeon

#### Genito-Urinary Diseases

FRANCIS RANDALL HAGNER, M.D.....	Genito-Urinary Surgeon
HENRY RANDALL ELLIOTT, M.D.....	Associate Surgeon
HOMER GIFFORD FULLER, M.D.....	Associate Surgeon
ADAM KEMBLE, M.D.....	Associate Surgeon

#### Gynecology

J. LEWIS RIGGLES, M.D.....	Attending Gynecologist
DANIEL LeRAY BORDEN, M.D.....	Attending Gynecologist
ALBERT ELWOOD PAGAN, M.D.....	Attending Gynecologist



**Obstetrics**

HURON WILLIS LAWSON, M.D.....Associate Obstetrician-in-Chief  
 ELIJAH WHITE TITUS, M.D.....Assistant Obstetrician

**Eye, Ear, Throat, and Nose**

EDWARD GRANT SEIBERT, M.D.....Laryngologist and Ophthalmologist

**Neurology**

BENJAMIN RUSH LOGIE, M.D.....Neurologist  
 WALTER HIBBARD MERRILL, M.D.  
 Electro-Therapeutist and Radiographer

**Dermatology**

CHARLES AUGUSTUS SIMPSON, M.D.....Attending Dermatologist

**Pathology**

FREDERICK FULLER RUSSELL, M.D.....Pathologist  
 JOHN BRADFORD BRIGGS, M.D.....Associate Pathologist  
 RALPH MICHELL LE COMTE, M.D.....Associate Pathologist

**Laboratory**

FRANK ADELBERT HORNADAY .....Director

**Medical Building**

HENRY KNOX CRAIG, M.D. ....Librarian  
 EMIL WALTER.....Superintendent of the Building  
 ANNA ELIZABETH SELLNER.....Secretary to the Dean

**HISTORICAL**

The *Department of Medicine of the George Washington University*, in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required, and in 1893 attendance on four annual

courses was made obligatory upon all candidates for the degree of Doctor of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Department of Medicine. In 1902 the old Medical College building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

#### EDUCATIONAL POSITION

The Medical Department of the University has been for several years a member of the Association of American Medical Colleges. It is one of Medical Colleges designated as "class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

*The degree of M.D. given by the University is recognized as evidence of adequate medical education by every medical examining board in the United States and with credentials of required preliminary education, will admit the holder of the degree to any state or governmental examination.*

These facts guarantee the character of the work done by the College and insures its students and graduates all the advantages which accrue from such association and recognition.

#### BUILDINGS AND OTHER FACILITIES

##### Buildings of the Medical Department

All the buildings adjoin each other and consist of the Medical College Building and the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city within one block of both systems of car lines. As the Hospital and Dispensary adjoin the College, their clinical facilities are easily accessible to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the College laboratories.

*Medical College Building.*—A modern commodious, five-story structure, with spacious, well-lighted, well-ventilated lecture and class rooms, laboratories, and students' rooms. It has an elevator service, and is equipped throughout with steam heat, gas, electricity, and all modern improvements.

*Laboratories.*—Six in number (for anatomy, chemistry, physiological and clinical chemistry, histology and embryology, physiology and pharmacology, and bacteriology and pathology) are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

*University Medical Library.*—Open for study and consultation from 9 a.m. to 9 p.m. with a Librarian who is a graduate of Medicine in charge. It contains at present more than 3,000 volumes, and provision is made to

add to it as published the important new works on medicine. The most important medical periodicals are regularly received. The Library is an excellent working collection, as it affords opportunity to read up adequately on the subjects presented in the courses.

*Pathological Museum.*—Contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

### ADVANTAGES OF LOCATION

#### Advantages of Washington as a place for pursuing the study of medicine

This city now has nearly half a million inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of over three thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the Faculty.

The *great libraries and museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's Office of the United States Army is the most complete medical library in the world, and all leading medical periodicals of the world are subscribed for. All the facilities of this great library are open to *medical students*. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various Government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivaled opportunity for studying the conditions met with in military and general surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum which contains the most complete and best arranged collection of *materia medica* in the world. The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the *Army and Navy Medical Schools* have been here located. The Alumni of this College are largely represented in all public services, and have been highly successful in passing the rigid examinations given by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this College.

*Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.*



## ADMISSION

The requirements for admission to the Department of Medicine for the session 1913-14 are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are:

A. The minimum requirement for admission is a four year accredited high school course or its equivalent amounting to fifteen units. The total fifteen units must be presented as no conditions are allowed.

B. A Bachelor's degree from an approved college or University.

C. Candidates not having a Bachelor's degree or who have not completed fifteen units of work in an accredited secondary school, may be admitted upon passing examinations in the following branches or presenting acceptable certificates for the same.

The credits which are acceptable for entrance are as follows:

1. *Required, 8 units.*—English 2 units, Mathematics (algebra to quadratics and plane geometry) 2 units; Language (Latin, French or German) 2 units; History 1 unit; Science taken from physics, chemistry, botany or zoology, 1 unit.

2. *Optional, 7 units.*—The optional seven units are elective and may be satisfied by high school subjects approved by the College Entrance Examination Board. These subjects are English, Mathematics, Latin, Greek, Modern Language, History, Physics, Chemistry, Botany, Zoology, Physiography, Drawing, Shop-work and Music.

A unit is the credit value of 36 weeks' work of five recitation periods per week, each period to be not less than 40 minutes. A point is a subject pursued through one-half the above time. Two points may be considered the equivalent of one unit.

An examination is given by the University in the latter part of May and September of each year to students who are deficient in whole or part of the above subjects. Candidates desiring examination must submit an application for the examination and submit certificates of character to the Dean before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of the examination.

As the laws relating to the preliminary educational qualifications required of physicians differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.



**Admission after January 1, 1914**

After January 1, 1914, the minimum requirement for admission to the freshman year in Medicine will be at least one year's College work in Physics, Chemistry and Biology and a reading knowledge of at least one modern language besides English, preferably German or French.

**PRELIMINARY (PREMEDICAL) YEAR**

A preliminary year is offered by the University to meet the requirement of a year of College work necessary to enter the freshman class in Medicine after January 1, 1914. This year is given in Columbian College (Department of Arts and Sciences). Students taking this year are required to take the full year's work, both didactic and laboratory in Biology, Physics, Chemistry, and a Modern Language (French, German, or Spanish).

**Admission to Columbian College**

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirements must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

**COURSES AND DEGREES OFFERED BY THE UNIVERSITY IN ADDITION TO OR IN COMBINATION WITH THE COURSE FOR THE DEGREE OF DOCTOR OF MEDICINE**

The states of North Dakota, Iowa, Minnesota, Colorado and Indiana now require applicants for the practice of medicine to have two years of college work in addition to graduation in medicine.

To students who intend to practice in these states or who desire two years of college work before entering upon the study of medicine, the University offers a six-year combination course, by which a student may meet the requirements of these states and at the same time obtain the degree of Bachelor of Science in Medicine and Doctor of Medicine.

**Six-year course for the Degree of Bachelor of Science in Medicine and Doctor of Medicine**

Regular students enrolling for this course will complete two years of work aggregating at least thirty-six prescribed hours in Columbian College, and the four-year course in the Department of Medicine. On the completion of this six-year course the student will receive at the same time the degree of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

**a. Columbian College:**

SUBJECT	HOURS
Biological Sciences:	
Zoology 1.....	3
Botany 1, 2.....	3
Chemistry 1, 3, 23.....	7
English 1 or 2.....	3
German, French, or Spanish.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 1 or 3, and 2.....	5
Psychology and Logic.....	3
	—
	36

**b. Department of Medicine:**

The four-year course for the degree of Doctor of Medicine.

**Seven-year course for the Degree of Bachelor of Arts and Doctor of Medicine**

Regular students in this course will complete at least forty-eight hours, as prescribed in Columbian College, and the four-year course in the Department of Medicine. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The forty-eight hours of prescribed subjects in Columbian College are as follows:

**Columbian College:**

SUBJECT	HOURS
Biological Sciences:	
Zoology 1, 2.....	6
Botany 1, 2.....	3
Chemistry 1, 3, 23.....	7
English 1 or 2.....	3
German.....	6
French or Spanish.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 1 or 3, and 2.....	5
Psychology and Logic.....	3
Economics, History, or English.....	3
	—
	48

**ADMISSION OF STUDENTS FROM OTHER SCHOOLS**

Students who have attended one or more terms at any other medical college in good standing, and who have the necessary preliminary educational requirements, may be admitted to advanced standing upon passing the examination required of students for the stage at which they propose

to enter, or upon presenting certificates of examination covering courses equal to those in this College.

Students who have been in attendance upon an Arts course in other accredited colleges or universities may be admitted to advanced standing in any of the premedical courses offered by the University upon examination or upon presentation of properly certified evidence of satisfactory completion of work for which credit is asked.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students to any of the courses, provided they have the educational attainments which will enable them to pursue properly the studies they elect.

#### ACADEMIC YEAR

The *Academic Year* begins on the last Wednesday in September and ends on the Wednesday following the Wednesday nearest the first day of June. It is divided into two semesters of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of thirty-two weeks each, exclusive of vacations and holidays. The next session, the ninety-second, begins September 24, 1913, and ends June 10, 1914.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

#### SYSTEM OF INSTRUCTION

Instruction is carried on by laboratory work, lectures, recitations, bedside instruction, and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical College are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to ground thoroughly the students in the knowledge which is necessary to a practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

*The policy adopted by the College is to give a comprehensive, well graded and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.*

### ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table. Major subjects are in italics:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
<i>Anatomy.</i>	<i>Anatomy.</i>	<i>Medicine.</i>	<i>Medicine.</i>
<i>Histology.</i>	<i>Organic and</i>	<i>Surgery.</i>	<i>Surgery.</i>
<i>Embryology.</i>	<i>Physiological</i>	<i>Surgical</i>	<i>Orthopædics.</i>
<i>Physiology.</i>	<i>Chemistry.</i>	<i>Pathology.</i>	<i>Genito-Urinary</i>
<i>General</i>	<i>Pathology.</i>	<i>Fractures and</i>	<i>Diseases.</i>
<i>Chemistry.</i>	<i>Bacteriology.</i>	<i>Dislocations.</i>	<i>Operative</i>
	<i>Clinical</i>	<i>Obstetrics.</i>	<i>Surgery.</i>
	<i>Microscopy.</i>	<i>Therapeutics.</i>	<i>Gunshot</i>
	<i>Materia Medica.</i>	<i>Electro-</i>	<i>Wounds.</i>
	<i>Pharmacology.</i>	<i>Therapeutics.</i>	<i>Obstetrics.</i>
	<i>Minor Surgery.</i>	<i>Gynecology.</i>	<i>Gynecology.</i>
	<i>Physical</i>	<i>Medical</i>	<i>Laryngology</i>
	<i>Diagnosis.</i>	<i>Jurisprudence.</i>	<i>and Otology.</i>
	<i>Pathological</i>	<i>Clinical</i>	<i>Ophthalmology.</i>
	<i>Physiology.</i>	<i>Chemistry.</i>	<i>Dermatology.</i>
	<i>Hygiene.</i>	<i>Dietetics.</i>	<i>Psychiatry.</i>
		<i>Physical</i>	<i>Pediatrics.</i>
		<i>Diagnosis.</i>	<i>Neurology.</i>
		<i>Tropical</i>	<i>Clinics.</i>
		<i>Medicine.</i>	
		<i>Clinics.</i>	

The *clinics* above listed comprise the medical, surgical, and other clinics given in the third and fourth years, and are as hereafter noted under the announcements of the different clinical subjects.

### OUTLINE OF CURRICULUM

#### Hours of Required Work in Each Subject

(On the basis of 32 actual weeks in each year)

#### *First Year*

	LEC. REC. DEM.	LABORA- TORY	CLINICS	TOTAL
Anatomy.....	99	297		396
Chemistry, Inorganic.....	96	208		304
Histology.....	40	110		150
Embryology.....	15	45		60
Physiology.....	60	182		242
Total of first year.....				1,152



*Second Year*

	LEC. REC. DEM.	LABORA- TORY	CLINICS	TOTAL
Anatomy.....	48	144		192
Organic and Physiological Chemistry.....	99	160		259
Pharmacology.....		64		64
Bacteriology.....	50	150		200
Pathology.....	43	129		172
Clinical Microscopy.....		60		60
Physiology, Pathological.....		16		16
Hygiene.....	32			32
Materia Medica.....	128			128
Minor Surgery.....	32		32	64
Physical Diagnosis.....	32		32	64
Total of second year .....				1,241

*Third Year*

Medicine.....	160		208	368
Surgery.....	128		257	385
Obstetrics.....	75		16	91
Physical Diagnosis.....	8		24	32
Gynecology.....	32		32	64
Pediatrics.....			26	26
Therapeutics.....	64			64
Dietetics.....	24			24
Electro-Therapeutics and Radi- ography.....	16		16	32
Surgical Pathology.....		16		16
Tropical Medicine.....	16			16
Medical Jurisprudence.....	16			16
Clinical Chemistry.....	12		36	48
*Total for third year.....				1,182

*Fourth Year*

Medicine.....	160		106	332
Surgery.....	104			
Orthopedics.....	24			
Genito-Urinary Surgery.....	24		278	470
Laryngology.....	24			
Ophthalmology.....	16			
Dermatology.....	14		16	30
Pediatrics.....	46		48	94
Psychiatry and Clinical Neurol- ogy.....	20		30	50
Obstetrics.....	32		48	80
Gynecology.....	32		32	64
*Total for fourth year.....				1,120

\* The number of hours represents the amount of time *each* student devotes to the course. In addition to the hours scheduled in the third and fourth years, each student is required to do satisfactorily considerable practical work: he is assigned to cases in the University and Garfield Hospitals, is required to assist at operations, to attend cases of labor, administer anaesthetics, attend autopsies, and to take the history of cases. Fully 120 hours annually are required to do this unscheduled work.

## ANATOMY

MATTHEW KOLLIG, M.D. ....	Professor
OSCAR BENWOOD HUNTER, M.D. ....	Associate Professor
ALBERT PERKINS TIBBETS, M.D. ....	Instructor
CARL LAWRENCE DAVIS, M.D. ....	Instructor

The instruction in the various anatomical sciences—gross human anatomy, neurology, embryology and histology—is carried on by the Division of Anatomy of which the Professor of Anatomy is the head.

This insures complete correlation of the various anatomical branches and adequate instruction in each.

During the first year the course in Gross Anatomy is given mainly by practical laboratory work.

Osteology and Syndesmology are taught by recitations and demonstrations at the beginning of the course, preparatory to the more advanced studies in anatomy. Complete disarticulated skeletons are loaned to the students, so that they may familiarize themselves with the osteological features of the various parts during their dissection. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting room work is supplemented by demonstration, recitation and lectures, illustrated by lantern slides, models, diagrams and special dissections.

In the second year a course in topographical anatomy is given, in which recitations and laboratory demonstrations, frozen sections and special dissections are used to familiarize the student thoroughly with the subject. The systematic study of the gross and minute anatomy of the central nervous system and organs of special sense is pursued by means of lectures, recitations, and laboratory work.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

*First Year*

	HOURS		
	Lect., Rec.,		
	Dem.	Lab.	Total
Gross Anatomy.....	99	297	396

*Second Year*

Gross and Topographical Anatomy.....	48	144	192
Totals.....	147	441	588

In *histology and embryology* instruction is given in the care and use of the microscope and in the preparation of tissues for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures and recitations.

*First Year*

	HOURS		Total
	Lect., Rec.,	Lab.	
	Dem.		
Histology.....	40	110	150
Embryology.....	15	45	60
	<hr/>	<hr/>	<hr/>
Totals.....	55	155	210

## PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph.D.....	Professor
HENRY RANDALL ELLIOTT, M.D.....	Associate
ELIJAH WHITE TITUS, Phar.D., M.D.....	Instructor

The course in physiology consists of lectures, recitations, demonstrations, laboratory exercises and conferences during the first year. It begins in the second half of the first semester, so that the student is, almost at the beginning of his course in medicine, introduced to the functional viewpoint in his work. In the first semester general physiology is taken up both by lectures and laboratory exercises. In the second semester more intensive work is done, and the physiology of the bodily systems is considered. The functions of the nervous system and special senses, of the blood, of the heart and circulatory system, of glands, of the respiratory mechanisms, and of reproduction are considered by means of lectures and recitations, and, as far as possible, experimentally. In the laboratory each student performs the main experiments illustrating the facts regarding bodily function, and demonstration experiments are given of those functions which are too complex for the student to perform by himself. In this laboratory work each student is required to keep records of his experiments, and each experiment is supervised and the record criticized and checked by one of the instructors before the student leaves the laboratory for the day. The class is divided into sections for oral recitations, which are supplemented by written recitations.

In the second year a series of laboratory exercises on the physiological action of drugs is given (see the announcement under Department of Pharmacology and Therapeutics), and in conjunction with that laboratory work lectures are given and recitations are held in which the functional disturbances in disease are considered. In this course special attention is given to the abnormalities of action of the heart and circulatory system, to the mechanical disturbances in respiration, and to the disturbances of the nervous system and the special senses. Abnormalities of metabolism, matters which are almost exclusively chemical, are not taken up in this course. By this course it is intended to bring the course in normal physiology into closer relations with the succeeding courses in Pathology, Therapeutics and General Medicine.

*First Year*

	HOURS		
	Lect., Rec., Dem.	Lab.	Total
Physiology.....	60	182	242

*Second Year*

Pathological Physiology.....	16	...	16
Totals.....	76	182	258

## CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D..... Professor  
 FRANK ADELBERT HORNADAY, S.B., M.D..... Associate Professor

*General Chemistry.*—A series of illustrated lectures accompanied by recitations, laboratory work, and exercises on theoretical, inorganic, organic, and technical chemistry, with emphasis upon their relation to medicine.

*Organic Chemistry.*—A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

*Physiological Chemistry.*—A series of lectures, laboratory work and recitations on the proximate principles of the human body.

*Clinical Chemistry.*—A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

*First Year*

	HOURS		
	Lect., Rec., Dem.	Lab.	Total
General Chemistry.....	96	208	304

*Second Year*

Organic Chemistry and Physiological Chemistry.....	99	160	259
---	----	-----	-----

*Third Year*

Clinical Chemistry .....	12	36	48
Total.....	207	404	611



## MATERIA MEDICA AND THERAPEUTICS

BUCKNER MCGILL RANDOLPH, M.D. ....	Professor
NOBLE PRICE BARNES, M.D. ....	Associate Professor
HENRY RANDALL ELLIOTT, M.D. ....	Associate
WALTER HIBBARD MERRILL, M.D. ....	Instructor

*Second Year.*—(1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations of drugs. (5) The laboratory course in connection with the study of Pharmacology consists of practical instruction and experiments in pharmacodynamics. The student performs experiments showing the effects of certain drugs on digestion and the physiological actions are investigated of such drugs as Morphine, Atropine, Aconite, Strychnine, Digitalis, Veratrine, Physostigmine, Cocaine, Extr. Suprarenal glands, etc., and the effects of acids and alkalies in varying strength on the skin, mucous membrane and other tissues.

*Third Year.*—(1) Systematic lectures and recitations on the physiological action of drugs and other remedial agents, as demonstrated by laboratory experiment and clinical application; their therapeutic use in disease; their modes of administration; and a review of their toxicology. (2) A review of the principles of prescription writing, with practical exercises by students in writing prescriptions in the metric and English systems. (3) Lectures in applied therapeutics, devoted to the study of the application of remedial measures to morbid physiological and pathological states, as they occur clinically. (4) Lectures and section demonstrations in electro-therapeutics and Roentgen therapy.

*Second Year*

	HOURS		
	Lect., Rec.,		
	Dem.	Lab.	Total
Pharmacology.....	...	64	64
Materia Medica and Toxicology.....	128	...	128

*Third Year*

Therapeutics.....	64	...	64
Electro-therapeutics.....	16	16	32
Totals.....	208	80	208

## DIETETICS

JOHN BENJAMIN NICHOLS, M.D. ....	Associate
----------------------------------	-----------

A thorough course of lectures on the principles of feeding in health and disease.

*Third Year*

	HOURS		
	Lect., Rec., Dem.	Lab.	Total
Dietetics .....	24	...	24

## PATHOLOGY AND BACTERIOLOGY

FREDERICK FULLER RUSSELL, M.D. ....	Professor
JOHN BRADFORD BRIGGS, M.D. ....	Associate
RALPH MICHELL LE COMTE, M.D. ....	Instructor

*Bacteriology.*—The first part of the session is devoted to a laboratory course of instruction in the fundamental principles and methods of pure bacteriology. A thorough drilling is given in the preparation of culture media, in sterilization and disinfection, staining, and in the several methods of differentiating bacteria.

*Pathology.*—The course in Pathology comprises general and special pathology. Post-mortem examinations will be utilized when possible. Coincidentally with the above is included the study of the principal pathogenic bacteria: the principles of immunity and serum therapy.

The course in instruction in special pathology will include the study of those processes requiring surgical relief; the healing of wounds and other injuries; of special diseases, neoplasms, and problems of experimental pathology.

The course in *Clinical Microscopy* comprises the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

*Second Year*

	HOURS		
	Lect., Rec., Dem.	Lab.	Total
Bacteriology.....	50	150	200
Pathology.....	43	129	172
Clinical Microscopy.....	...	60	60
Totals.....	93	339	432

## MORBID ANATOMY

WALTER WATKINS WILKINSON, M.D. ....	Associate
-------------------------------------	-----------

The instruction in this course is mainly practical and consists of post-mortem examinations and demonstrations pertaining to the subjects of morbid anatomy and special pathology. Instruction in the technique of post-mortem examinations for scientific purposes and in medico-legal cases is a feature of the course. Each student is required personally to assist in and render a detailed report upon at least six autopsies.

*Third and Fourth Year*

HOURS

Morbid Anatomy.....Each Student 20

**MEDICINE**

STERLING RUFFIN, M.D.....	Professor
GEORGE NICHOLS ACKER, A.M., M.D.....	Clinical Professor
THOMAS ASH CLAYTOR, M.D.....	Clinical Professor
JAMES DUDLEY MORGAN, A.B., M.D....	Associate and Clinical Professor
MONTGOMERY EARL HIGGINS, M.D., Surg. U.S.N.....	Professor
JOHN BENJAMIN NICHOLS, M.D.....	Associate
HARRY HAMPTON DONNALLY, A.M., M.D.....	Associate
WALTER ASHBY FRANKLAND, M.D.....	Clinical Associate
JOSEPH LAWN THOMPSON, M.D.....	Instructor
CHARLES WILBUR HYDE, M.D.....	Instructor
COURSEN BAXTER CONKLIN, M.D.....	Instructor
WILLIAM JOHNSTON MALLORY, M.D.....	Instructor

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections, which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students afford a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a

body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material (see announcement of Psychiatry and Clinical Neurology).

<i>Second Year</i>			
	Lect., Rec., Dem.	HOURS Clinics	Total
Physical Diagnosis.....	32	32	64
<i>Third Year</i>			
Physical Diagnosis.....	8	24	32
General Medicine.....	160	208	368
<i>Fourth Year</i>			
General Medicine.....	160	172	332
Totals.....	360	370	796

#### TROPICAL MEDICINE

MONTGOMERY EARL HIGGINS, M.D., Surgeon U. S. N..... Professor

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

#### *Third Year*

	HOURS
Tropical Medicine, 1 hour.....	16

#### PSYCHIATRY AND CLINICAL NEUROLOGY

WILLIAM ALANSON WHITE, M.D., Superintendent of the

Government Hospital for the Insane.....	Professor
BENJAMIN RUSH LOGIE, M.D.....	Instructor
GEORGE HENRY SCHWINN, M.D.....	Instructor
FRANCIS MERRIAM BARNES, Jr., M.D.....	Instructor

A series of lectures and clinics is given upon the subject of insanity in its various forms.

These clinics are given at the Government Hospital for the Insane, which, with its more than two thousand beds, affords one of the largest clinics in this country.

Students are taught in the same classes with students of the Army and Navy Medical Schools.



*Fourth Year*

HOURS

Psychiatry and Neurology, 1 hour, Jan.-May. Dr. WHITE.....	20
Clinical Psychiatry, 1½ hours, Jan.-May. Drs. SCHWINN and BARNES. 30	

**PEDIATRICS**

GEORGE NICHOLS ACKER, A.M., M.D.....	Professor
EDGAR PASQUAL COPELAND, M.D.....	Associate
HARRY HAMPTON DONNALLY, M.D.....	Clinical Associate
FRANK LEECH, M.D.....	Clinical Associate
WILLIAM J. FRENCH, M.D.....	Instructor

Didactic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

*Fourth Year*

HOURS

	Lect., Rec., Dem.	Clinics.	Total
Pediatrics.....	46	48	94

**PHYSICAL DIAGNOSIS**

WILLIAM CABELL MOORE, M.D.....	Associate
--------------------------------	-----------

A complete course is given in this subject by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

*Second Year*

HOURS

	Lect., Rec., Dem.	Clinics	Total
Physical Diagnosis.....	32	32	64

*Third Year*

Physical Diagnosis.....	8	24	32
	40	56	96

**SURGERY**

WILLIAM CLINE BORDEN, M.D.....	Professor
AURELIUS RIVES SHANDS, M.D.....	Professor
FRANCIS RANDALL HAGNER, M.D.....	Professor

ARTHUR AUGUSTIN SNYDER, M.D.....	Clinical Professor
JOHN RYDER WELLINGTON, M.D.....	Clinical Professor
LUTHER HALSEY REICHELDERFER, M.D.....	Clinical Professor
LOUIS ANATOLE LA GARDE, M.D.....	Professor
CHARLES STANLEY WHITE, M.D.....	Associate
WILLIAM FRANCIS MATTINGLY SOWERS, M.D.....	Associate
EDWARD THOMAS MURDAUGH FRANKLIN M.D.....	Instructor
HARRY HYLAND KERR, M.D.....	Instructor
CHARLES WILBUR HYDE, M.D.....	Instructor
ARTHUR LEROY HUNT, M.D.....	Instructor
CLINE CHIPMAN, M.D.....	Instructor

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anaesthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown.

Ward clinics and bedside instruction are made a prominent part of the course. The class is divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals and dispensaries. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Practical work is required of each student in the preparation of dressings and sterilization of instruments. Each student is required to give, under instruction, at least six anaesthesias and to assist in at least six operations.

In the fourth year a thorough course is given in operative surgery.

*Second Year*

	Lect., Rec., Dem.	HOURS Clinics	Total
Minor Surgery.....	32	32	64

*Third Year*

General Surgery.....	128	257	385
Surgical Pathology.....	16		16
Radiography.....	16	16	32

*Fourth Year*

General Surgery.....	104	186	290
Orthopedics.....	24		24
Genito-Urinary.....	24	20	44
Gunshot Wounds.....	8		
Operative Laboratory.....		40	40
Totals.....	344	551	895

**SURGICAL PATHOLOGY**

WILLIAM FRANCIS MATTINGLY SOWERS, M.D.....Associate

Surgical pathology is taught by thorough instruction in the gross and microscopic appearance of surgical diseases and injuries, and by a systematic course of lectures and quizzes by which the etiology, pathology, symptomatology, and treatment of the surgical affections and their relations to each other are shown.

**ORTHOPEDICS**

AURELIUS RIVES SHANDS, M.D.....Professor

A course of lectures and recitation on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

**GENITO-URINARY DISEASES**

FRANCIS RANDALL HAGNER, M.D.....Professor

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

**GUNSHOT WOUNDS**

LOUIS ANATOLE LA GARDE, M.D.....Professor

The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from the Army Medical School.

OBSTETRICS

ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.....	Professor
JULIAN MAYO CABELL, M.D.....	Clinical Professor
HURON WILLIS LAWSON, S.B., M.D.....	Associate Professor
ALEXANDER YELVERTON PEYTON GARNETT, M.D.....	Instructor
ELIJAH WHITE TITUS, M.D.....	Instructor

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, together with practical work. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by diagrams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections, each section being given bedside instruction, and the individual students being required to attend a stated number of cases.

The out-patient obstetrical service is large and thoroughly organized for instruction. Cases are usually referred several weeks before the expected date of confinement. Each case is promptly investigated by the instructor in charge and assigned to a student who in company with the instructor visits and examines the patient as soon as practicable and thereafter visits the patient at intervals of one week, and attends the case during labor. Students make post-partum visits daily for four days and every other day thereafter until the case is discharged by the instructor.

*Third Year*

	HOURS		
	Lect., Rec., Dem.	Clinics.	Total
Obstetrics.....	75	16	91

*Fourth Year*

Obstetrics.....	32	48	80
Totals.....	107	*64	*171



## GYNECOLOGY

JOHN WESLEY BOVÉE, M.D.....	Professor
ALBERT LIVINGSTON STAVELY, M.D.....	Clinical Professor
GIDEON BROWN MILLER, M.D.....	Associate
WALTER ASHBY FRANKLAND, M.D.....	Associate
J. LEWIS RIGGLES, M.D.....	Associate
VIRGIL B. JACKSON.....	Instructor
DANIEL LERAY BORDEN, M.D.....	Instructor

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater and ward clinics given by the Professor of Gynecology and his assistants.

*Third Year*

	HOURS		
	Lect., Rec., Dem.	Clinics.	Total
Gynecology.....	32	32	64

*Fourth Year*

Gynecology.....	32	32	64
Totals.....	64	64	128

## LARYNGOLOGY AND OTOTOLOGY

CHARLES WILLIAMSON RICHARDSON, M.D.....	Professor
EDWARD GRANT SEIBERT, M.D.....	Instructor
OSCAR ADDISON MACK MCKIMMIE, M.D.....	Instructor
HOBART SOUTHWORTH DYE, M.D.....	Instructor

The course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

\* The total number of clinic hours cannot be given, as each student is required to attend ten cases, exclusive of the demonstration work and Ward and Dispensary Clinics above enumerated.

*Fourth Year*

	HOURS
Lectures, 3 hours, Oct.-Nov. Professor RICHARDSON.....	24
Clinics. Professor RICHARDSON, Dr. DYE, Dr. McKIMMIE, and Dr. SEIBERT.....	24

## OPHTHALMOLOGY

WILLIAM KENNEDY BUTLER, M.D.....	Professor
DANIEL KERFOOT SHUTE, A.B., M.D.....	Associate Professor
EDWARD GRANT SEIBERT, M.D.....	Instructor

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

*Fourth Year*

	HOURS
Lectures. Professor BUTLER.....	16
Clinics. Professors BUTLER and SHUTE and Dr. SEIBERT.....	24

## DERMATOLOGY

RANDOLPH BRYAN CARMICHAEL, M.D.....	Professor
CHARLES AUGUSTUS SIMPSON, M.D.....	Instructor

The lectures in this course will be principally clinical, supplemented by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

*Fourth Year*

	HOURS
Lectures. Professor CARMICHAEL.....	14
Clinics, Professors CARMICHAEL and Dr. SIMPSON.....	16

## HYGIENE

DANIEL WEBSTER PRENTISS, M.D.....	Professor
-----------------------------------	-----------

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

*Second Year*

	HOURS
Lectures and recitations. Professor PRENTISS.....	32

## MEDICAL JURISPRUDENCE

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.....Professor

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

*Third Year*

HOURS

Lectures, 1 hour, Feb.-May. Professor WOODWARD..... 16

## CLINICAL FACILITIES

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

**University Hospital and the University Dispensary**

*H Street, between Thirteenth and Fourteenth Streets N. W. and adjacent to the Medical Building.*—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Department of Medicine, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical work. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually.

The staff is composed of members of the Faculty of Medicine.

**Garfield Memorial Hospital**

*Florida Avenue and Tenth Street N. W.*—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital.

Members of the Faculty on the visiting staff: Professors CLAYTOR and MORGAN, Clinical Medicine; Professors SNYDER, WELLINGTON, and REICHELDERFER, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician; Dr. CABELL, Clinical Obstetrics.

**Children's Hospital**

*W Street, between Twelfth and Thirteenth Streets N. W.*—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department, to which students are regularly assigned for clinical instruction.

Members of the Faculty on the visiting staff: Professor KING and YARROW, Consulting Physicians; Professor WELLINGTON, Clinical Sur-

gery; Professor ACKER and Drs. COPELAND, DONNALLY, and LEECH, Clinical Medicine.

#### Emergency Hospital and Central Dispensary

*Fifteenth Street and Ohio Avenue N.W.*—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in Clinical surgery, particularly in fractures and dislocations which are taught in regular clinics by the instructor in this subject.

Members of the faculty on the visiting staff: Professor HAGNER, Clinical Genito-Urinary Diseases; Drs. WHITE and JACKSON, Surgery; Professor MORGAN and Dr. ELLIOTT, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

#### Columbia Hospital for Women

*Twenty-fifth Street and Pennsylvania Avenue N. W.*—This hospital has 68 charity beds for diseases peculiar to women, and 50 charity maternity beds. Both the obstetrical and the gynecological services are particularly good and are fully utilized for students.

Members of the Faculty on the visiting staff: Professor BOVÉE and Dr. MILLER, Clinical Gynecology; Drs. KELLY, CABELL, and RIGGLES, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

#### The Government Hospital for the Insane

This hospital is maintained by the United States Government. It has 2,500 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE, and Drs. MILLER and BARNES. Other members of the Faculty on service at this hospital are Professor FRANZ; Professor SHUTE, Consulting Ophthalmologist; Professors RUFFIN, and MORGAN, Consulting Physicians.

#### Episcopal Eye, Ear, Throat, and Nose Hospital

*Fifteenth Street, between L and M Streets N. W.*—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Drs. McKIMMIE and DYE, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

#### Lutheran Dispensary

*Fourteenth and N Streets N. W.*—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.



Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

#### Casualty Hospital

*Massachusetts Avenue N. E.*—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Dr. BARNES, Clinical Medicine.

#### Tuberculosis Hospital

*Fourteenth and Upshur Streets N. W.*—Members of the Faculty on staff: Professor CLAYTOR and Dr. RANDOLPH, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

### CLASSIFICATION AND ADVANCEMENT OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

*Proficiency* in all subjects is marked on the scale of 100.

*Examinations* are held at the end of the course in each subject.

In determining the proficiency of a student his laboratory and clinical work, his quiz record, attendance, and result of examination are all considered.

To be *advanced* a student must obtain a general average of 75 or more in all subjects of the year, and must not fail in more than one major or two minor subjects.

Students who obtain a general average of 75 or more, but who fail in not more than one major or two minors, may be advanced *conditioned* and may be permitted at the next examination period a re-examination in the subjects in which they fail, but all conditions must be removed before a student can be again advanced.

Students who fail of advancement or graduation will not be allowed re-examination, except by special permission of the Faculty, and must repeat all subjects in which they obtained less than 85 during the year, and pass an examination on all majors of preceding years in which they obtained less than 85 before they can be advanced or graduated. Students who fail to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty. In special examinations a fee of \$5 will be charged for each subject. Students who fail to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses. Students will not be admitted to examination unless they have paid all fees due at the time.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

## REQUIREMENTS FOR GRADUATION

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of 32 weeks each in four separate years; must have satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

## SCHOLARSHIPS

Four scholarships are provided for students.

*Corcoran Scholarships.*—In recognition of the liberality of the late W. W. Corcoran in endowing the University for the Department of Medicine, the Faculty of Medicine has established in the department four free scholarships.

Two of these scholarships are open for competitive examination to the graduates of the several high schools of the District of Columbia and are awarded to the two students whose averages are highest.

One scholarship is open for competitive examination to graduates of any reputable high school or college who shall give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the graduate whose average is highest.

The remaining scholarship is open for competitive examination to students who, though not graduates of any high school or college, give satisfactory evidence that they are fitted by previous education for the study of medicine, and at the same time give satisfactory written evidence of pecuniary inability and certificates of good moral character and industry, and is awarded to the student whose average is highest.

In establishing these averages professional aptitude and general qualifications are considered along with scholastic ability.

Applications for scholarships should be filed with the Dean not later than May 15. Students holding scholarships pay the matriculation, library, laboratory, and graduation fees, and make the deposit to cover breakage. Holders of scholarships must maintain a satisfactory scholastic average.

## PRIZES

A prize from the Ordronaux Prize Endowment will be awarded under conditions determined by the University authorities.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

## HOSPITAL APPOINTMENTS

Internes are annually appointed in the University Hospital. These appointments are made upon competitive examinations under conditions determined by the governing authorities of the Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

## FEES AND CONTINGENT EXPENSES

1. Matriculation (payable but once).....	\$5
2. Annual library fee.....	3
3. Tuition fee per annum, including all charges for materials	150
4. Graduation fee.....	10
5. Fee for a certificate under the seal of the University.....	2

A deposit of \$10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use.....	\$5
Microscope for Bacteriological, Pathological, and Clinical Microscopy Laboratory use.....	6

Matriculation, library, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students who are unable to pay their fees monthly in advance

will be required to file an acceptable personal or corporate bond of \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Dean.

#### WITHDRAWALS

*Withdrawals will be granted only on recommendation of the Dean and the approval of the President.*

A certificate of work actually done will be given to any student granted a withdrawal or a transfer to another school during the session. A written request for withdrawal or transfer must be filed with the Dean and no permission to withdraw or transfer, and no certificate of work done will be given a student unless all fees and dues chargeable against him up to the end of the month in which he withdraws have been paid.

#### BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

---

For catalogues, application blanks, and further information, address

THE DEAN

*Department of Medicine,  
The George Washington University  
1325 H Street N. W., Washington, D. C.*



## DEPARTMENT OF DENTISTRY

### FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY  
JOHN ROLAND WALTON, D.D.S.,

Dean and Professor of Prosthetic Dentistry and Orthodontia

DANIEL KERFOOT SHUTE, M.D. .... Professor of Neuro-Anatomy

HENRY CLAY THOMPSON, D.D.S. .... Professor of Operative Dentistry

CHARLES EDWARD MUNROE, Ph.D., LL.D. .... Professor of Chemistry

SHEPHERD IVORY FRANZ, Ph.D. .... Professor of Physiology

CHARLES STANLEY WHITE, M.D. .... Professor of Oral Surgery

FREDERICK FULLER RUSSELL, M.D.,

Professor of Pathology and Bacteriology

NOBLE PRICE BARNES, M.D.,

Associate Professor of Materia Medica and Therapeutics

MATHEW KOLLIG, M.D. .... Professor of Anatomy

JOHN ROBERT DE FARGES, D.D.S., .... Associate Professor of Dental

Metallurgy, Jurisprudence, Economics, and Ethics

CHARLES TURK BASSETT, D.D.S.,

Associate Professor in Charge of the Dental Infirmary

ALLEN SCOTT WOLFE, D.D.S.,

Associate Professor of Crown and Bridge Work

CADMUS LINDEN ODOR, D.D.S.,

Associate Professor of Operative Technics

WILLIAM FRANCIS LAWRENCE, D.D.S.,

Associate Professor of Prosthetic Technics

ARTHUR BARTON CRANE, D.D.S., ... Associate Professor of Oral Surgery

D. DEWITT BEEKMAN, D.D.S.,

Associate Professor of Materia Medica and Therapeutics

FRANK ADELBERT HORNADAY, S.B., M.D.,

Associate Professor of Chemistry

HARRY RANDALL ELLIOTT, M.D. .... Associate in Physiology

JOHN WINSLOW TAYLOR, D.D.S., .... Instructor in Prosthetic Technics

CHARLES GARDNER SHOEMAKER, D.D.S.,

Instructor in Operative Technics

HENRY CISSEL YOUNG, D.D.S., .... Instructor in Prosthetic Technics

HERBERT CORNWELL HOPKINS, D.D.S. .... Lecturer on Orthodontia

ALBERT PERKINS TIBBETS, M.D. .... Instructor in Anatomy

GEORGE MILLER SHARP, D.D.S. .... Lecturer on Oral Prophylaxis

RALPH MICHELL LECOMTE, M.D.,

Instructor in Pathology and Bacteriology

JAMES WALTER BERNHARD, D.D.S.,

Instructor in Crown and Bridge Work

MARION EDWYN HARRISON, D.D.S. . . Demonstrator in Dental Infirmary

#### GENERAL STATEMENT

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The next academic year begins on Wednesday, September 24, 1913, and ends on Wednesday, June 10, 1914. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. For further information communicate with the Dean of the Dental Department or the Secretary of the University.

#### ADMISSION

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments from an approved school or college, or they must pass an examination.

Candidates are admitted without examination:

1. Upon presenting a diploma or certificate of a reputable college conferring on them the degree of A.B. or S.B., or an equivalent degree in the arts and sciences.

2. Upon presenting a diploma or certificate of graduation from a high school, academy, or preparatory school approved by the University as maintaining an adequate standard.

3. Upon presenting a certificate of admission to the Freshman class of an approved college.

4. Upon presenting a certificate of admission to another dental school approved by the University as maintaining an adequate standard.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement of an accredited four year high school.

Latin and Physics are required. An applicant deficient in either subject or both may be admitted to the first-year class conditioned, but conditions must be made up during the first year.

The scope of the different subjects is indicated in standard high school text-books.

A candidate may offer certificates of an approved school for work done in any preparatory subjects, and will be credited with the units repre-

sented by such work. A candidate failing to pass in two of three subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental Department.

#### AUDITORS

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations, but no credit will be allowed for such attendance only.

#### COURSE OF INSTRUCTION

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Anatomy. Physiology. General Chemistry. Histology. Operative Technics. Prosthetic Technics. Special Anatomy.	Organic Chemistry. Operative Dentistry. Prosthetic Dentistry. Pathology. Materia Medica Operative Technics. Prosthetic Technics. Infirmary Practice. Bacteriology. Dental Histology. Orthodontia Technics. Infirmary Practice. Clinics.	Operative Dentistry. Orthodontia. Prosthetic Dentistry. Comparative Dental Anatomy. Oral Surgery. Orthodontia Technics. Metallurgy. Prosthetic Technics. Infirmary Practice. Dental Therapeutics. Dental Pathology. Dental Bacteriology. Oral Prophylaxis. Dental Jurisprudence, Economics and Ethics. Infirmary Practice. Clinics.

These studies are further described in the following pages.

Hours of recitation, daily from 4.50 p.m. to 10.30 p.m.; 6.30 to 7.30 p.m., dinner hour.

#### PROSTHETIC DENTISTRY AND ORTHODONTIA

JOHN ROLAND WALTON, D.D.S. .... Professor  
HERBERT CORNWELL HOPKINS, D.D.S. .... Lecturer

1. *Prosthetic Dentistry*.—All branches in this department will be under the supervision of the professor. He will deliver the lectures and manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

2. *Orthodontia*.—Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliance upon models and practically correct cases of irregularity.

#### OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY

HENRY CLAY THOMPSON, D.D.S. .... Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technics and the infirmary.

#### CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D. .... Professor

FRANK ADELBERT HORNADAY, S.B., M.D. .... Associate Professor

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

#### PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph.D. .... Professor

HENRY RANDALL ELLIOTT, M.D. .... Associate

ELIJAH WHITE TITUS, Phar.D., M.D. .... Instructor

This subject is taught in lectures, recitations, and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental medicine and surgery, especially digestion, secretion, and the nervous system.



Three laboratory periods a week during a semester give the student first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

#### ANATOMY

MATTHEW KOLLIG, M.D.....	Professor
ALBERT PERKINS TIBBETS, M.D.....	Instructor
OSCAR BENWOOD HUNTER, M.D.....	Instructor
CARL LAWRENCE DAVIS, M.D.....	Instructor

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and stereopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

#### MATERIA MEDICA AND THERAPEUTICS

NOBLE PRICE BARNES, M.D.....	Associate Professor
D. DEWITT BEEKMAN, D.D.S.....	Associate Professor

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopoeia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

#### ORAL SURGERY

CHARLES STANLEY WHITE, M.D.....	Professor
ARTHUR BARTON CRANE, D.D.S.....	Associate Professor

Instruction in this subject will consist of didactic lectures, recitations case histories, together with clinics at regular intervals.

The lectures will deal with surgical bacteriology and pathology, surgical technique, anaesthesia, local and general wounds, hemorrhage, shock, new growths, constitutional diseases, plastic operations upon the palate and face, dislocations and fracture of the maxillae, and the extraction of teeth. Charts, diagrams, photographs and stereopticon slides will supplement the lectures.

In the clinics at the Emergency Hospital, illustrative cases will be shown. The student will be expected to attend such operations as pertain to this subject.

### HISTOLOGY

MATTHEW KOLLIG, M.D.....	Professor
ELIJAH WHITE TITUS, M.D.....	Instructor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

### PATHOLOGY AND BACTERIOLOGY

FREDERICK FULLER RUSSELL, M.D.....	Professor
JOHN BRADFORD BRIGGS, M.D.....	Associate
RALPH MICHELL LECOMTE, M.D.....	Instructor

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic

organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

### PROSTHETIC TECHNICS

WILLIAM FRANCIS LAWRENCE, D.D.S. .... Associate Professor  
JOHN WINSLOW TAYLOR, D.D.S. .... Instructor  
HENRY CISSEL YOUNG, D.D.S. .... Instructor

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in taking impressions, making models, dies, and casting; swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridge work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the Department is under the immediate supervision of the associate professor.

### OPERATIVE TECHNICS

CADMUS LINDEN ODOR, D.D.S. .... Associate Professor  
CHARLES GARDNER SHOEMAKER, D.D.S. .... Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy, and the forms and surface



markings of each tooth studied, the natural teeth, as well as enlarged models and drawings being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surface of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each student is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary.

#### COMPARATIVE DENTAL ANATOMY

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

#### CROWN AND BRIDGE WORK, GOLD INLAY, AND PORCELAIN

ALLEN SCOTT WOLFE, D.D.S.....Associate Professor  
JAMES WALTER BERNHARD, D.D.S.....Instructor

Instruction in this course is systematically given by lectures and clinics. The course in technique extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

#### METALLURGY

JOHN ROBERT DEFARGES, D.D.S.....Associate Professor

The subject of Metallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

#### PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE, AND ECONOMICS

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients the duty of upholding the honor and dignity of the profession, and the differences between the profession and business or manufacturing pursuits.



The lectures on jurisprudence will follow the text-book by Dr. Reh-fuss, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anaesthetics, the penalties, etc.

*Economics.*—This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentist, fees, book and card systems, and the general economy in conducting an office.

#### ORAL PROPHYLAXIS

GEORGE MILLER SHARP, D.D.S.....Lecturer

This subject will be taught didactically, and clinically practical work by the students in the treatment of the oral cavity will be required.

#### THE DENTAL INFIRMARY

CHARLES TURK BASSETT, D.D.S..... Associate Professor in Charge

JOHN WINSLOW TAYLOR, D.D.S..... Demonstrator

HENRY CISELL YOUNG, D.D.S..... Demonstrator

MARION EDWYN HARRISON, D.D.S..... Demonstrator

The Infirmary is open every week-day the entire year. An abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the demonstrator in charge, who is present from 1 until 5 o'clock.

#### CLINICAL STAFF

CAESARE LOUIS CONSTANTINI, D.D.S.....Clinician in Charge

ARTHUR DURDAN WEAKLEY, D.D.S.... Clinical Instructor in Dentistry

THOMAS LOCKE RUST, D.D.S..... Clinical Instructor in Dentistry

GEORGE BERTRAM ROPER MACDONALD, D.D.S.,

Clinical Instructor in Dentistry

WILLIAM CARL KILLINGER, D.D.S... Clinical Instructor in Orthodontia

MARK FLORUS FINLEY, D.D.S..... Clinical Instructor in Orthodontia

ALEXANDER DUNNINGTON COBEY, D.D.S.,

Clinical Instructor in Non-Cohesive Gold

GEORGE MILLER SHARP, D.D.S.,

Clinical Instructor in Special Crown Work

ZENAX WILBUR ALDERMAN, D.D.S.,

Clinical Instructor in Electro-Therapeutics

ROBERT EDWIN LAYTON, D.D.S..... Clinical Instructor in Dentistry

## TEXT-BOOKS AND WORKS OF REFERENCE

(The works first named and in *italics* are preferred.)

*Anatomy*.—Cunningham's *Text-book of Anatomy*; Cunningham's *Manual of Practical Anatomy*; Black's Dental Anatomy,.

*Physiology*.—Text-books: Haliburton's *Physiology*; Howell's *Physiology*; Tigerstedt's *Physiology*.

*Pathology and Bacteriology*.—Delafield and Prudden's *Pathology*; Jordan's *Bacteriology*.

*Chemistry*.—Simon's *Chemistry*; Barha's *College Chemistry*; Holland's *Medical Chemistry*.

*Materia Medica*.—H. C. Wood's *Therapeutics*; Hare's *Practical Therapeutics*; A. A. Stevens' *Modern Materia Medica and Therapeutics*; Culbreath's *Materia Medica and Pharmacy*; National Dispensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopoeia and National Formulary; Prinz's *Dental Materia Medica and Therapeutics*; Modern *Dental Materia Medica*; Buckley's *Therapeutics and Pharmacology*; Dorland's *Medical Dictionary*.

*Prosthetic Dentistry*.—*The American Text-Book of Prosthetic Dentistry*; Essig's *Dental Metallurgy*.

*Operative Dentistry*.—Harris' *Principles of Practice*; Tome's *Dental Anatomy and Surgery*; Taft's *Operative Dentistry*; Litch's *American System of Dentistry*; Kirk's *Operative Dentistry*; Johnson's *Operative Dentistry*.

*Oral Surgery*.—Scudder's *Tumors of the Jaws*; Ivy's *Applied Anatomy and Oral Surgery*.

*Histology*.—Nichols, Bohm and Davidoff's *Histology*; Bromell's *Anatomy and Histology of the Mouth*.

*Orthodontia*.—Angle's *Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ*; Talbot's *Irregularities of the Teeth*; Jackson's *Orthodontia*.

*Dental Jurisprudence*.—Rehfuss's *Dental Jurisprudence*.

*Dental Pathology and Therapeutics*.—Burchard's *Dental Pathology and Therapeutics*.

*Comparative Dental Anatomy*.—Thompson's *Comparative Dental Anatomy*.

## GRADUATION

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this Department, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be reexamined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this Department, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the demonstrators in charge with a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

#### COURSES IN ARTS AND SCIENCES

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours a week.

#### LOCATION

The Dental Building is No. 1325 H Street N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 724 9th Street N. W., on any week day, and also at the Dental Building, 1325 H Street N. W., on Tuesday and Thursday of each week at 4.30 p.m. during the session.

#### FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	2
3. Tuition fee per annum, including all charges for materials.....	125
4. Late registration fee in the case of students registering for the first term after October 20, or for the second term after February 20, excepting for courses which do not begin with the terms.....	2
5. Fee for graduation.....	10
6. Fee for a certificate under the seal of the University.....	2

7. A deposit of \$10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use.....	\$5
Microscope for bacteriological, pathological, and clinical microscopy laboratory use.....	6

The cost of instalments for the first year amounts to about \$20, and the cost of text-books to about \$30.

#### PAYMENT OF FEES

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. Fees are payable at the office of the Treasurer, 2024 G Street, or at the office of the Medical Department, 1325 H Street.

#### BOARD AND ROOMS

A register of boarding-houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

---

For catalogues, application blanks and further information, address  
J. ROLAND WALTON, D.D.S., *Dean*,  
724 9th Street N. W.



## PART III

### ASSOCIATED COLLEGES

NATIONAL COLLEGE OF PHARMACY  
COLLEGE OF VETERINARY MEDICINE

Institutions in the District of Columbia organized as corporations under the Charter of the University, having separate financial foundations but educationally forming a part of the system of the University.



# NATIONAL COLLEGE OF PHARMACY

## TRUSTEES OF THE NATIONAL COLLEGE OF PHARMACY

THE PRESIDENT OF THE UNIVERSITY, *ex-officio*

1913

WYMOND H. BRADBURY.  
SAMUEL WAGGAMAN.

JAMES K. EPPLEY.  
FRANK P. WELLER.

1914

CHARLES B. CAMPBELL.  
LEWIS FLEMER.

HERBERT C. EASTERDAY.  
WILLARD S. RICHARDSON.

1915

FRANK C. HENRY.  
HENRY E. KALUSOWSKI.

SAMUEL L. HILTON.  
WILLIAM T. KERFOOT

### Officers of the Board

*Chairman*, HENRY E. KALUSOWSKI.

*Vice Chairman*, LEWIS FLEMER.

*Secretary*, WYMOND H. BRADBURY.

*Treasurer*, H. C. EASTERDAY.

### FACULTY OF THE NATIONAL COLLEGE OF PHARMACY

CHARLES HERBERT STOCKTON, LL.D. . . . PRESIDENT OF THE UNIVERSITY  
HENRY E. KALUSOWSKI, M.D., Phar.D., Dean, and Professor of Pharmacy  
SAMUEL WAGGAMAN, M.D., Phar.D.,

Professor of Materia Medica, Botany, and Toxicology

GEORGE A. MENGE, Ph.D. . . . . Professor of Chemistry and Physics

HOWARD M. BRADBURY, Phar.D. . . . . Professor of Analytical Chemistry

BURTON J. HOWARD, S.B. . . . . Professor of Microscopy

HENRY B. FLOYD, Phar.D. . . . . Professor of Mercantile Pharmacy

ALEXANDER MUNCASTER, Phar.D., LL.M.,

Professor of Pharmaceutical Jurisprudence

DOUGLAS TSCHIFFLEY, Phar.D. . Assistant to the Professor of Pharmacy

LORING W. BEESON, Phar.D.,

Assistant to the Professor of General Chemistry

HOMER K. BUTLER, Phar.D.,

Assistant to the Professor of Analytical Chemistry

## CALENDAR

## 1913

September 18, *Thursday*—Admission Examination begins at 1 p.m. in the Lecture Room of the College.

September 24, *Wednesday*—Forty-first Session begins.

November 27, *Thursday*—Thanksgiving Day, a holiday.

**Recess from December 24, 1913, to January 3, 1914, both inclusive**

## 1914

February 23, *Monday*—a holiday.

May 6, *Wednesday*—Annual Examinations for promotion and graduation begin.

June 10, *Wednesday*—Commencement.

## GENERAL STATEMENT

The National College of Pharmacy, which is the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11 of that year. In February, 1906, it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the College embraces courses in chemistry, botany, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The College building is centrally located on I street northwest between Eighth and Ninth streets. It is easily reached by the principal street car lines of the city.

## Preliminary Education and Examination

The College requires of its Matriculants a knowledge of the branches usually taught in the public schools of Washington, D. C., to the extent of *two years in the high schools or its equivalent*, and they must be at least seventeen years of age. Evidence of this may be shown by certificates from reputable teachers or by the results of an examination to be held at the College, at one o'clock p.m., THURSDAY, September 18, 1913.

Beginning with the session of 1914-15, candidates for admission to the College will be required to have three years' high school instruction or its equivalent. Beginning with the session of 1916-17, candidates will be required to have four years' high school instruction or its equivalent.



### SPECIAL COURSES

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

### THE DEGREE

The degree conferred is *Doctor of Pharmacy*.

### QUALIFICATIONS FOR THE DEGREE

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany and Toxicology; and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

### MATERIA MEDICA, BOTANY AND TOXICOLOGY

#### Freshman Course

The first lectures are introductory to the study of elementary botany, after which follow vegetable histology and plant physiology. The subject-matter of these lectures is thoroughly explained by means of charts diagrams, and specimens.

#### Junior Course

This course is devoted to the consideration of the various theories concerning the vegetable world and the practical results obtained by experienced laborers in this science. The lectures are illustrated by means of the lantern and microscope. A large part of the course is devoted to a consideration of the official organic drugs.

#### Senior Course

The lectures are mainly upon the active principles, adulterants, official preparations, therapeutic uses, and doses; after which the organic and inorganic poisons are taken up under three heads: (1) Corrosive; (2) Irritant; and (3) Neurotic Poisons. Under these three divisions are explained briefly their action, detection, and antidote.

### PHARMACY

#### Freshman Course

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on

metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination, granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

#### Junior Course

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, following by carbon, boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury; antimony, arsenic, bismuth, and gold.

#### Senior Course

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products used in pharmacy, vegetable oils, soaps, and products from resins.

### ANALYTICAL CHEMISTRY

The instruction in this Department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this Department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the test of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

## GENERAL CHEMISTRY AND PHYSICS

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

## MICROSCOPY

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distinguished from another as well as to the detection and identification of the most common adulterants used.

## MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE

These courses are required in the Senior class only.

## FEES

Matriculation.....	\$5
Tickets for the full year's course of instruction, Freshman .....	80
Tickets for the full year's course of instruction, Junior .....	85
Tickets for the full year's course of instruction, Senior.....	90
Single tickets for Chemistry, Materia Medica, Botany, and Toxicology, each.....	20
Single tickets for Analytical Chemistry.....	25
Single tickets for Practical Pharmacy .....	25
Single tickets for Microscopy .....	20
Single tickets for Mercantile Pharmacy.....	10
Single tickets for Pharmaceutical Jurisprudence.....	10
Fee for Diploma.....	10

For further information consult the Dean, HENRY E. KALUSOWSKI, 808 I Street N. W.

# COLLEGE OF VETERINARY MEDICINE

## BOARD OF TRUSTEES

J. A. T. HULL.	DAVID EASTBURN BUCKINGHAM, V.M.D.
H. ROZIER DULANY.	JOHN LOCKWOOD, D.V.S.
WILLIAM CORCORAN EUSTIS.	JOHN POLLARD TURNER, V.M.D.

## FACULTY

CHARLES HERBERT STOCKTON, LL.D.... PRESIDENT OF THE UNIVERSITY  
DAVID EASTBURN BUCKINGHAM, V.M.D.,

Dean, Professor of Materia Medica, Therapeutics and Canine Practice.

CHARLES EDWARD MUNROE, Ph.D., LL.D..... Professor of Chemistry

JOHN LOCKWOOD, D.V.S..... Professor of Veterinary Surgery

JOHN POLLARD TURNER, V.M.D.,

Professor of Theory and Practice of Veterinary Medicine

FREDERICK FULLER RUSSELL, M.D.,

Maj. U. S. A., Director Army Medical School, Professor of Bacteriology and Pathology

HARRY WEBSTER GRAYBILL, B.Sc., A.M., D.V.M.,

Professor of Zoology and Parasitology

MATTHEW KOLLIG, A.B., M.D... Professor of Histology and Embryology

HULBERT YOUNG, V.M.D.,

Assistant Professor of Veterinary Obstetrics and Physiology

JOHN M. BUCK, D.V.M..... Assistant Professor of Veterinary Anatomy

OTIS DOW SWETT, S.M., LL.M..... Assistant Professor of Chemistry

WILLIAM W. BRIDE, A.B., LL.B... Lecturer on Veterinary Jurisprudence

HERBERT S. WILLIAMS, V.M.D.,

Clinical Instructor in Military Veterinary Science

MATTHEW KOLLIG, M.D..... Instructor in Histology and Embryology

RALPH MICHELL LE COMTE, M.D.,

Instructor in Bacteriology and Pathology

TUNIS HICKS, D.V.M. .... Instructor in Veterinary Anatomy

WILLIAM H. O'HARA, D.V.M. .... Instructor in Veterinary Medicine

CHAUNCEY M. GRUBB, D.V.M.,

Instructor in Dairy Inspection and Milk Hygiene

HARRY A. LOCHBOEHLER, D.V.M.,

Instructor in Veterinary Materia Medica and Therapeutics

JAMES W. NORRIS, D.V.M..... Instructor in Dentistry and Horseshoeing

G. M. POTTER, D.V.M.,

Instructor in Special Pathology, Infectious Diseases and Meat Inspection.



JOSEPH N. HORNBAKER, D.V.M.....Instructor in Physiology  
EDWARD H. RILEY, B.Agr., D.V.M.,  
Instructor in Breeds and Breeding and Judging  
LEWIS L. HELLER, B.Sc., Agr.....Instructor in Feeds and Feeding  
HARRY H. FETTER, Ph.G.....Instructor in Pharmacy and Botany  
EDWIN H. INGERSOLL, S.B.....Instructor in Physiological Chemistry

#### REQUIREMENTS FOR ADMISSION

Students presenting a diploma from any recognized college, normal or high school are eligible to admission without examination.

Students not having the above qualifications will be required to pass an examination equivalent to a 2d grade Civil Service Examination, supplemented by History and Geography of the United States and its possessions. (U. S., B. A. I. Circular No. 150).

#### ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students of other recognized and approved veterinary schools may be admitted to this school as follows:

Those qualified to enter the second year of such a school may be admitted to the second-year class of this school, those qualified to enter the third year of their own school to the third year of this school; provided, however, that the subjects pursued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years in this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

#### EVIDENCE OF ATTENDANCE

At the end of the college year each student is entitled to a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college. (U. S. B. A. I. Cir. 150).

#### ADVANCED STANDING

Advanced standing will be given for degrees in Medicine, Dentistry, or Veterinary Medicine.

Students holding degrees in Arts, Science, Philosophy, or Agriculture who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology, equivalent to the courses in these subjects in this college, may upon satisfactory evidence of their proficiency be credited with such studies; provided, however, that such students shall devote two years' study in veterinary medicine, the last year of which is passed in this College.

## SPECIAL STUDENTS

Students, approved by the Dean, not candidates for the degree of Doctor of Veterinary Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree of Doctor of Veterinary Medicine. Nor can such students enter upon the regular veterinary course without complying with all the regular requirements for admission.

## CLASSIFICATION OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz., first, second, third and fourth year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a re-examination in the subjects in which they fail. The Faculty may dismiss any student from the College, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise, for the profession of veterinary medicine.

## ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Anatomy	Anatomy	Theory and	Theory and
Histology	Physiological	Practice	Practice
Embryology	Chemistry	Bacteriology	Small Animal
Chemistry and	Pharmacy	Pathology and	Practice
Physics	Physiology	Laboratory	Surgery and
Laboratory	Hygiene	Diagnosis	Restraint
Chemistry	Breeds and	Surgery and	Therapeutics
Materia Medica	Breeding and	Restraint	Obstetrics
and Toxicology	Judging	Therapeutics	Veterinary
Botany	Dairy Inspection	Dentistry	Jurispru-
Zoology	and Milk	Parasitology	dence
	Hygiene	Soundness and	Control of
	Feeds and Feed-	Lameness	Infective
	ing	Shoeing and	Diseases
	Clinics	Balancing	Meat Inspec-
		Clinics	tion and P.
			M. Exami-
			nation
			Clinics

For lecture, laboratory and dissecting hours a schedule card is furnished.

Clinical work in the veterinary and canine hospitals connected with the College and at abattoirs and stock and dairy farms is required of second, third and fourth year students.

### ANATOMY

JOHN M. BUCK, D.V.M.....Assistant Professor  
TUNIS HICKS, D.V.M.....Instructor

The instruction in Anatomy is given in a series of lectures, demonstrations, recitations, and laboratory work, the latter being the most important.

The lectures are intended to present the general anatomical features of the horse and other domestic animals, and to point out the anatomical relations of the organs and parts of the body most subject to surgical operations.

The horse is used as the type subject in dissection, and every student is required to dissect all the parts of the horse, and such other of the domesticated animals, including the ox, sheep, swine, dog and cat, as may prove most expedient.

The laboratory is well supplied with all of the parts of the skeleton of the horse, and portions of the skeleton of various other domestic animals, for the work in osteology. Ample material is always available for the dissection of joints, muscles, viscera, and the vascular and nervous systems. The laboratory is also provided with a complete model of the horse, showing the relation of all the organs and parts of the body, for demonstrations in general and surgical anatomy. The course extends throughout the first and second years.

*Text-book.*—Sisson's Veterinary Anatomy.

### HISTOLOGY AND EMBRYOLOGY

MATTHEW KOLLIG, A.B., M.D.....Professor

These subjects are taught by a series of carefully correlated lectures recitations, quizzes and demonstrations, and will include such instruction in microscopy as a working knowledge of the use of the simple and compound microscope and accessories, supplemented by the fundamental laws of optics; the method of preparing tissues for microscopic examination, and the technique of mounting.

Comparative histology will deal with the minute structure of the tissues and organs of various animals, including man. In addition to the microscopical demonstrations, lantern demonstrations will also be given.

Embryology under this head will present the salient features of the anatomy and physiology of the fecundated ovule up to the time of birth.

*Text-book.*—Bohm, Davidoff and Huber's Histology.

**PHYSIOLOGY**

HULBERT YOUNG, V.M.D..... Assistant Professor  
 JOSEPH N. HORNBAKER, D.V.M..... Instructor

The course in Physiology consists of lectures, demonstrations and laboratory exercises. The lectures cover all the important facts and theories regarding bodily functions of the animal, and are illustrated by diagrams, models and prepared specimens.

In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of nerves and muscles, and on the special senses of animals.

Special emphasis is laid on the relation of normal physiological functions to the disturbances of function in disease and upon the physiological action of drugs.

It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding course in Pathology, Therapeutics and General Veterinary Medicine.

*Text-book.*—Howell's Physiology, Smith's Veterinary Physiology.

**GENERAL CHEMISTRY****First Year**

CHARLES EDWARD MUNROE, Ph.D., LL.D..... Professor  
 OTIS DOW SWETT, S.M..... Assistant Professor

*General Chemistry.*—A series of illustrated lectures, accompanied by recitations and exercises on theoretical, inorganic, organic and technical Chemistry. The student is required to take notes on these lectures, which he must submit for examination.

*Laboratory Practice.*—A laboratory course for the study of the principles of chemistry which is designed to instruct students in the methods of conducting chemical experiments.

*Text-book.*—Holland's Medical Chemistry and Toxicology.

**PHYSIOLOGICAL CHEMISTRY****Second Year**

EDWIN HENRY INGERSOLL, S.B..... Instructor

This course will consist of lectures and laboratory instruction, and includes the study of water from a sanitary standpoint; the chemical examination of milk, the tissues and fluids of the body; the isolation of the digestive enzymes, and a study of their action in vitro.

**MATERIA MEDICA AND THERAPEUTICS**

DAVID EASTBURN BUCKINGHAM, V.M.D..... Professor  
 HARRY A. LOCHBOEHLER, D.V.M..... Instructor



**First Year**

(1) Lectures upon and demonstrations of drugs and their preparations and doses used in veterinary practice will be followed by recitations to assist in memorizing. (2) Practical exercises will be given in prescription writing, also a short course in Veterinary Pharmacology.

**Third Year**

(1) Systematic lectures upon the physiological action of drugs and their effects in disease, their therapeutic uses, and their methods of administration to animals. (2) Prescription writing, in which students are given hypothetical cases for which to prescribe. (3) The therapeutic application of various agencies not drugs.

*Text-book.*—Winslow's Veterinary Materia Medica and Therapeutics.

**PRACTICE OF VETERINARY MEDICINE**

JOHN POLLARD TURNER, V.M.D.....Professor  
WILLIAM HENRY O'HARA, D.V.M.....Instructor

This subject is taught by a series of lectures, recitations, quizzes and clinics extending over a period of two years.

The student is personally drilled in all the various diseases and doctrines taught in a well regulated veterinary school.

Especial attention is given to practical work whereby the student can become proficient in the diagnosis and treatment of disease.

Visits are required to the three veterinary hospitals in connection with the University, and personal attention is given students in visits to various large stables in and adjacent to the city of Washington, where practical instruction is given the third and fourth year classes in physical diagnosis among horses, cows and hogs.

Equal attention is given diseases of cattle as of horses, whereby the student is properly fitted for either city or country practice.

Diseases of food-producing animals will be thoroughly explained.

*Text-books.*—Freidberger and Froehner's Pathology and Therapeutics of Domestic Animals; Hutyra and Marek's Special Pathology and Therapeutics of Domestic Animals; Malkmus' Clinical Diagnosis; Glass' translation of Muller's Diseases of the Dog.

**VETERINARY SURGERY AND RESTRAINT**

JOHN LOCKWOOD, D.V.S.....Professor  
CHAUNCEY MERLE GRUBB, D.V.M.....Instructor

The instruction given in this course embraces systematic lectures upon the principles and practice of Veterinary Surgery.

The different surgical operations are illustrated in clinic and upon the cadaver, and the uses of all the important surgical instruments and

appliances are demonstrated in the same manner. The use of anes-  
thetics, the practice of dental surgery, and castration on all domestic  
animals will receive special attention.

*Text-books.*—Moeller's Operative Veterinary Surgery; Fleming's Oper-  
ative Veterinary Surgery; Hobday's Canine and Feline Surgery; Williams,  
Principles and Practice of Veterinary Surgery; Pfeiffer and Williams'  
Surgical Operations; White's Restraint of Domestic Animals; Merillat's  
Surgery.

#### BACTERIOLOGY AND PATHOLOGY

FREDERICK FULLER RUSSELL, M.D..... Professor  
RALPH MICHEL LE COMTE, M.D..... Instructor

*Bacteriology.*—This subject comprises laboratory instruction in the  
fundamental principles and methods of pure bacteriology. Thorough  
drilling is given in the preparation of culture media, in disinfection,  
sterilization, staining and the general methods of bacterial differentia-  
tion. Following this course, which is given daily during October, the  
further study of bacteria is taken up in connection with and as applied  
to pathology.

Pathology comprises the laboratory study of the general and special  
phenomena of inflammation, and a detailed study of the pathological  
processes found in the various diseases. The relation of bacterial and  
other microphytic life to disease processes and results is studied coin-  
cidentally and constitutes a course in applied bacteriology. In connec-  
tion with the laboratory work a course of lectures and demonstrations  
is given upon immunity, serum therapy and protective inoculation.

*Surgical Pathology.*—A special course in the healing of wounds and  
injuries and in the pathology of surgical operations is given in the third  
and fourth years.

*Clinical Microscopy.*—Comprising the study of the various tissues,  
fluids, ejecta, and dejecta, with a view to diagnosis of diseased condi-  
tions, is given in the first part of the third year.

*Text-book.*—Delafield and Prudden's Pathology, Hiss and Zinsser's  
Text-book on Bacteriology.

#### SPECIAL PATHOLOGY, TREATMENT AND CONTROL OF INFECTIOUS DISEASES

G. M. POTTER, D.V.M..... Instructor

The lectures in this course will be given with reference to the etiology,  
pathogenesis, symptoms, diagnosis, treatment and prevention of the  
infectious diseases. Local and national regulations and measures gov-  
erning the control and eradication of diseases, with particular reference  
to the work of the United States Government in the eradication of infec-  
tious diseases will be clearly explained.

*Text-books.*—Huttyra and Marek's Special Pathology and Therapeutics of Domestic Animals, Volume I, translated by Mohler, Eichhorn and Fisher; Moore's The Pathology of Infectious Diseases of Animals; James Laws's Veterinary Medicine, Volume IV, third revised edition.

#### BREEDS AND BREEDING AND JUDGING

EDWARD H. RILEY, B.Agr., D.V.M. .... Instructor

The course covers the chief phases of live-stock work, including the judging, breeding and management of horses, cattle, sheep and swine.

It is introduced by discussions upon the origin of animal life, natural selections, the origin of breeds and the domestication of animals, as well as the principles of breeding, heredity, environment, selection, individual conformation and the history and development of breeds.

Students obtain practical experience in the judging of the various breeds and classes of animals, by visits to neighboring farms.

*Text-books.*—Plumb's Types and Breeds of Farm Animals; Goubaux and Barrier's Exterior of the Horse.

#### FEEDS AND FEEDING

LEWIS L. HELLER, B.Sc.Agr. .... Instructor

This course will cover the principles of animal nutrition, balanced rations, practical feeding and the economical production of beef, milk, mutton and pork.

*Text-book.*—Henry's Feeds and Feeding.

#### MILK HYGIENE AND DAIRY INSPECTION

CHAUNCEY M. GRUBB, D.V.M. .... Instructor.

The course in Milk hygiene will be given by lectures and demonstrations throughout the second year. The students will be taught the theory of milk secretion, the composition and characteristics of milk, the various methods of testing, together with the chemistry and bacteriology of milk, abnormal forms of milk, and diseases transmissible through milk to bovines and human beings, with a study of the epidemics produced. Sanitary stabling and the sanitary handling of milk will be considered, showing the construction of various types of dairy barns and dairy houses, the manner of milking, care of the milk and the varieties and care of dairy utensils; also the study of sterilization and pasteurization.

*Text-books.*—Jensen's Milk Hygiene, translated by Pearson. Bulletin No. 56, Marine-Hospital Service, Milk and its relation to the public Health.



**MEAT INSPECTION AND POST-MORTEM EXAMINATION**

G. M. POTTER, D.V.M.....Instructor

The subject involves the control of food animals destined for slaughter; their ante-mortem and post-mortem inspection with reference to the diseases which affect the wholesomeness of the meat. Further, the preparation of meat-food products, the various methods of preservation of meat and the conditions to which the meat and meat products are subject due to the different infections and contaminations. The application of the Regulations of the Department of Agriculture in connection with the judgment of carcasses, meats and meat-food products.

Practical demonstrations in meat inspection and judgment will be given at the local abattoirs.

Post-mortem examinations and demonstrations of morbid anatomy will be given, as opportunities arise, in the various hospital and ambulatory clinics in and about Washington, D. C. Special consideration will be given to discussion of gross pathological changes, procedure of technic, preparation of pathological specimens for museum purposes and methods of securing and forwarding material for diagnosis. Students will be required to write complete protocols of each case.

*Text-book.*—Mohler and Eichhorn's translation of Edelmann's *Meat Hygiene*, second revised edition.

**ZOOLOGY AND PARASITOLOGY**

HARRY W. GRAYBILL, B.Sc., A.M., D.V.M.....Professor

*Zoology.*—In this course a brief survey of the general principles of zoology is undertaken. The history of zoology, the classification of the animal kingdom, the structure of typical forms in the different Phyla and the distribution of animals on the face of the earth will be considered. The course is designed to familiarize the student with the main facts and theories of zoology.

*Parasitology.*—This course is designed to give the student a practical knowledge of animal parasites. The nature of parasitism, the classification of parasites and the structure and life histories of those parasites of importance from the standpoint of meat inspection and veterinary practice are considered. By the use of fresh and preserved materials the student is given a first-hand knowledge of the more important parasites. Due consideration is given to the diseases caused by animal parasites, their prophylaxis, treatment and eradication.

**VETERINARY OBSTETRICS**

HULBERT YOUNG, D.V.M.....Assistant Professor

The course of instruction will consist of lectures on obstetrical anatomy, foetal development, presentations and the diseases incidental to the periods of gestation and parturition.



The lectures will be illustrated by diagrams, models, natural preparations, and other appliances for demonstrating the principles taught.

*Text-book.*—Fleming, Dalrymple, Williams.

#### SHOEING AND BALANCING

JAMES WALTER NORRIS, D.V.M.....Instructor

The course is intended to familiarize students with the principles of shoeing, the examination of the feet and proper use of special shoes for relief of defects or disease.

*Text-book.*—Lungwitz on Horseshoeing, Adams' translation.

#### DENTISTRY

JAMES WALTER NORRIS, D.V.M.....Instructor

The course in dentistry includes lectures on the development of the teeth of the domesticated animals, the determination of age, irregularities of the teeth, oral surgery and dental clinics.

*Text-book.*—Merillats' Animal Dentistry and Diseases of the Mouth.

#### BOTANY

HARRY H. FETTER, Ph.G.....Instructor

The course in botany embraces the general relation of plants, vegetative organs, their functions, reproductive organs and nutrition.

Ecological factors, diversity of plant life, evolution of sex, differentiation of tissues, and plant physiology will be fully considered.

#### PHARMACY

HARRY H. FETTER, Ph.G.....Instructor

Pharmacy includes the history and nomenclature of the U. S. Pharmacopoeia, metrology, metric system and common system of weights and measures. Principles employed in making various preparations, classification of official preparations, incompatibility.

Supplemented by laboratory work in which students are required to compound formulae of ointments, lotions, draughts and various preparations, official and extemporaneous.

#### MILITARY PRACTICE

HERBERT S. WILLIAMS, D.V.M.,

Clinical Instructor in Veterinary Military Practice

This course consists of lectures and demonstrations of purely military veterinary subjects, and is given at Fort Myer, Va., the cavalry and artillery post near Washington, D. C.

The subjects of saddling, biting and draft, together with the study of the proper conformation of animals used for military purposes, are included in this set of lectures.

The control of epizootics in military life is also given special consideration.

#### VETERINARY JURISPRUDENCE

WILLIAM W. BRIDE, A.M., LL.B. .... Lecturer

A series of lectures upon the Law of Animals, including suggestions relating to the conduct of veterinarians as experts in the trial of cases involving the above law.

#### SPECIAL LECTURES

In addition to the foregoing courses of lectures, a number of government experts have been engaged to give lectures on subjects of special interest to the veterinarian.

These men are specialists in their lines of scientific research, and this is the only school giving such a course.

#### EXAMINATIONS AND DEGREE

Examinations are held at the end of the course in each subject. Students failing in examinations will be permitted to be re-examined at the next regular examination period. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Dean. In order to avail themselves of the privilege of re-examination, students must file their written applications with the Dean not later than fifteen days before the date set for the examinations.

Proficiency is marked upon a scale of 100. A grade of 70 is required to pass an examination. Students who fail to appear at the regular examination period will be charged a fee of \$3 for a special examination in each subject.

If a satisfactory examination is passed, the student receives the Degree of Doctor of Veterinary Medicine (D.V.M.)

#### PRIZES

1. Gold medal for student attaining highest average for whole course.
2. Prize for best work in operative surgery for senior student.
3. Prize of surgical instrument for best anatomical specimen prepared by a Sophomore student.
4. Prize of surgical instrument for best anatomical specimen prepared by a Freshman student.

In addition to the foregoing, students attaining a general average of 90 per cent or over for the entire course will be graduated "With Distinction," the same to be inscribed upon their diploma.

### THE VETERINARY LIBRARY

This library is located in the Administration Building of the College of Veterinary Medicine, and is open from 8 a.m. to 10 p.m.

It contains, in addition to volumes on veterinary medical subjects, the current veterinary journals.

Provision is made in the annual library fee charged every student to add to it as published, the important new works on veterinary medicine.

### OTHER LIBRARIES

Washington contains the Library of the Surgeon-General's Office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the government, is open to the public between the hours of 9 a.m. and 4.30 p.m. There is also the Library of Congress and the many excellent libraries of the various other government offices, in addition to the University Medical Library.

### FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable only on first entry into the University) .....	\$5
2. Library fee per annum.....	2
3. Tuition fee per annum.....	100
4. Fee for graduation.....	10

A deposit of \$5 per annum is required of every student to cover loss, breakage or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter-session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar, and will be received only at the end of a quarter-session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use.....	\$5
Microscope for Bacteriological, Pathological and Clinical	
Microscopy Laboratory use.....	6

### PAYMENT OF FEES

All fees are to be paid to the clerk. Tuition fees are payable quarterly, in advance. Matriculation, library and laboratory fees are payable in full, in advance.

## STUDENT EMPLOYMENT

The College of Veterinary Medicine will aid students, especially those coming from a distance, to obtain suitable employment as a means of defraying a part or all of their expenses while in pursuit of their college course. Opportunities for such employment in Washington are exceptionally good. The many Departments of Government, the Library of Congress, Congressmen's secretaryships, law offices, contractors' and architects' offices, journalism, stenography, etc., offer a large number of positions of the most diverse kinds. While the College must not be understood as in any sense engaging to find employment for prospective students, in a great many cases important assistance can be rendered duly qualified applicants, if the fact of their desire to obtain employment is known. Applicants are particularly cautioned against coming to the University, intending to depend upon outside employment for support without being provided with funds sufficient to meet the expenses of at least the first half-year. Communications should be addressed to

THE DEAN,  
*College of Veterinary Medicine,  
The George Washington University,  
2113-2115 Fourteenth St. N.W., Washington, D.C.*

## BOARD AND ROOMS

A register of approved boarding-houses is kept by the clerk. Accommodations cost from \$25 to \$40 a month.

For further information apply to David E. Buckingham, Dean, The George Washington University, College of Veterinary Medicine, Nos. 2113-2115 Fourteenth Street N. W., Washington, D. C.



## **PART IV**

**STUDENTS IN THE UNIVERSITY  
DEGREES CONFERRED, MISCELLANEA**



# STUDENTS REGISTERED IN THE UNIVERSITY 1912-1913

## DEPARTMENT OF ARTS AND SCIENCES

### SCHOOL OF GRADUATE STUDIES

#### AUDITOR

- Holmes, Mrs. Kate Osgood; District of Columbia.....916 17th Street  
*Topics*—Archaeology, History of Art.
- Howell, Phebe A.; District of Columbia.....729 Gresham Place  
*Topics*—Archaeology, History of Art.

#### IN ATTENDANCE

- Bacon, Charles B.; Minnesota.....Bureau of Chemistry  
 S.B., 1909, University of Minnesota. *Topic*—Bacteriology.
- Berg, William Nathan; New York.....Bureau of Animal Industry  
 S.B., 1904, Ph.D., 1907, Columbia University. *Topics*—Anatomy, Histology and Pathology.
- Coopersmith, Samuel; Nebraska.....1230 11th Street  
 A.B., 1910, University of North Carolina; A.M., 1912, University of Nebraska. *Topic*—Chemistry.
- Gilbert, William Williams; Vermont.....3534 11th Street  
 B.S. in Agriculture, 1904; S.M., 1909, University of Vermont.  
*Topic*—Chemistry.
- Hartley, Carl; Nebraska.....Room 306, Bureau of Plant Industry  
 A.B., 1907; A.M., 1909, University of Nebraska. *Topic*—Chemistry.
- Hirsch, Morris; New York.....1312 Belmont Street  
 S.B., 1911, College of the City of New York. *Topic*—Chemistry.
- Hustvedt, Olaf Mandt; Iowa...Bureau of Ordnance, Navy Department  
 Graduate, 1909, United States Naval Academy. *Topics*—Chemistry, Mathematics, Physics.
- Palmore, Julian Ivanhoe; Virginia.....Bureau of Chemistry  
 S.B., 1902; S.M., 1904; Virginia Polytechnic Institute. *Topic*—Bacteriology.
- Riley, Cathryn Vedralia; District of Columbia.....1754 S Street  
 A.B., 1912, Wellesley College. *Topic*—Chemistry.
- Smith, Nathan Raymond; Vermont.....1739 F Street  
 S.B., 1911, University of Vermont. *Topic*—Chemistry.

Starbecker, Moses; New York.....1104 5th Street  
S.B., 1910, College of the City of New York. *Topic*—Chem-  
istry.

#### DOCTOR OF CIVIL LAW

Miller, Clarence Alphonso; Missouri,  
American Consulate, Tampico, Mexico  
LL.B., 1899, Kansas City School of Law; LL.M., 1906, M.Dip.,  
1906, George Washington University.

#### CIVIL ENGINEER

Ball, William Curtis Cooley; Maryland,  
58 East 86th Street, New York City  
B.S. in C.E., 1912, George Washington University.  
Potbury, Robert John; District of Columbia.....1131 Euclid Street  
B.S. in C.E., 1912, George Washington University.  
Prentiss, Augustin Mitchell; District of Columbia. 1727 Church Street  
B.S. in C.E., 1911, George Washington University.  
Scott, Joseph Addison Preston, Jr.; District of Columbia  
402 9th Street N.E.  
B.S. in C.E., 1912, George Washington University.  
Veihmeyer, Frank; District of Columbia..... 1518 S Street  
B.S. in C.E., 1912, George Washington University.

#### ELECTRICAL ENGINEER

McCalip, Curtis Edgar; Maryland,  
806 East Preston Street, Baltimore, Md.  
B.S. in E.E., 1912, George Washington University.  
Safford, Howard Palmer; District of Columbia.....1933 Park Road  
B.S. in E.E., 1912, George Washington University.  
Wiegand, Henry Frank; District of Columbia  
Room 279, U. S. Patent Office  
B.S. in E.E., 1911, George Washington University.

#### MASTER OF SCIENCE

Church, Herbert Ashmum; Virginia. Takoma Park, Washington, D. C.  
C.E., 1905, Lehigh University. *Topics*—Major, Engineering;  
Minors, Engineering, Geology.  
Dodge, Cleon Orestes; New Hampshire.....Bureau of Chemistry  
S.B., 1905, New Hampshire College. *Topics*—Major, Chemis-  
try; Minors, Bacteriology, Microscopy.  
Finkelstein, Reuben; District of Columbia.....1230 11th Street  
A.B. and Teacher's Diploma, 1911, George Washington Univer-  
sity. *Topics*—Major, Education; Minors, Physics, Economics.  
Gardiner, Robert Franklin; Rhode Island.....1223 Irving Street  
S.B., 1908, Rhode Island State College. *Topics*—Major, Chem-  
istry; Minors, Bacteriology, Geology.



- Green, Fitzhugh; Missouri.....Army and Navy Club  
Graduate, 1909, United States Naval Academy. *Topics*—  
Major, Chemistry; Minors, Physics, Mathematics.
- Gordon, Willis Owen; Illinois....225 Oak Avenue, Takoma Park, D. C.  
B.S. in Chemistry, 1911, University of Illinois. *Topics*—Major,  
Chemistry; Minors, Chemistry, Bacteriology.
- Ingersoll, Edwin Henry; District of Columbia....2118 Third St. N. E.  
S.B., 1911, George Washington University. *Topics*—Major,  
Chemistry; Minors, Chemistry, Bacteriology.
- Mackall, Colin Mackenzie; Virginia.....305 D Street  
A.B., 1909, B.S. in Chemistry, 1910, University of Virginia.  
*Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology.
- McLeran, John David; District of Columbia.....401 M Street N. E.  
A.B., 1896, The Iuka Normal Institute; A.M., 1903, Southern  
Normal University. *Topics*—Major, Chemistry; Minors, Eng-  
lish, History.
- Mansfield, Wendell Clay; New York.....U. S. National Museum  
S.B., 1908, Syracuse University. *Topics*—Major, Paleontology;  
Minors, Zoology, Mineralogy.
- Marsh, Allen Johnson; District of Columbia.....628 E Street N. E.  
S.B., 1910, George Washington University. *Topics*—Major,  
Chemistry; Minors, Bacteriology, Geology.
- Miller, Harry McClure; Kentucky,  
Hygienic Laboratory, 25th and E Streets  
*Topics*—Major, Chemistry; Minors, Bacteriology, Zoology.
- Palkin, Samuel; District of Columbia.....1736 15th Street  
Ph.B., 1910, Yale University. *Topics*—Major, Chemistry; Mi-  
nors, Bacteriology, Microscopy.
- Peck, Caro Beth; Illinois.....1005 13th Street  
S.B., 1908, Northwestern University. *Topics*—Major, Physics;  
Minors, Chemistry, Physics.
- Reavis, Andrew Bryant; District of Columbia.....Patent Office  
LL.B., 1911, National University; A.B., 1912, George Washing-  
ton University. *Topics*—Major, Physics; Minors, Applied Math-  
ematics, Physics.
- Rieger, John B.; Pennsylvania.....Bureau of Chemistry  
S.B., 1907, University of Michigan. *Topics*—Major, Chemistry;  
Minors, Anatomy, Pathology.
- Rowley, Clifford Alonzo; District of Columbia.....1344 Kenyon Street  
M.P.L., 1909, S.B., 1911, George Washington University; LL.B.,  
1909, LL.M., 1912, National University. *Topics*—Major, Phys-  
ics; Minors, Applied Mathematics, Physics.
- Smith, Delos Hamilton; Arizona.....Southern Building  
B.S. in Architecture, 1906, George Washington University.  
*Topics*—Major, Architecture; Minors, Architecture, Archaeology.

- Valaer, Peter, Jr.; North Carolina.....Bureau of Internal Revenue  
S.B., 1906, North Carolina College of Agriculture and Mechanic  
Arts. *Topics*—Major, Chemistry; Minors, Bacteriology, Micros-  
copy.
- Welsh, Luther; Missouri.....1717 S Street  
Graduate, 1909, United States Naval Academy. *Topics*—Major,  
Chemistry; Minors, Mathematics, Physics.
- Wilkinson, Theodore Stark, Jr.; District of Columbia....2000 R Street  
Graduate, 1909, United States Naval Academy. *Topics*—Major,  
Chemistry; Minors, Mathematics, Physics.

## MASTER OF ARTS

- Ashley, Rebecca Sherman; Minnesota.....1100 M Street  
*Topics*—Major, Archaeology; Minors, Archaeology, English.
- Barnes, Charles Maurice; Virginia,  
Office of Foreign Trade Advisers, Department of State  
A.B., 1910, George Washington University. *Topics*—Major,  
Economics; Minors, Sociology, History.
- Bevard, Katherine Harper; District of Columbia.....1423 R Street  
A.B. and Teacher's Diploma, 1911, George Washington Univer-  
sity. *Topics*—Major, Education; Minors, Education, English.
- Bradshaw, May Paul; District of Columbia.....901 C Street N. E.  
A.B., 1909, George Washington University. *Topics*—Major,  
History; Minors, English, Economics.
- Brigham, Gertrude Richardson; Massachusetts, Smithsonian Institution  
*Topics*—Major, English; Minors, History, French.
- Carlson, Henry Edwin; Illinois....National Cathedral School for Boys  
A.B., 1908, Lake Forest College. *Topics*—Major, German;  
Minors, English, German.
- Carter, Francis Edward; Virginia, Episcopal High School Alexandria, Va.  
*Topics*—Major, History; Minors, History, Political Science.
- Fleming, John Paton; Virginia.....1861 Wyoming Avenue  
*Topics*—Major, History; Minors, History, English.
- Hancock, Walter Edgar; Texas.....Falls Church, Va.  
A.B., 1912, George Washington University. *Topics*—Major, His-  
tory; Minors, History, English.
- Hood, Joseph Douglas; Illinois.....2009 Kalorama Road  
A.B., 1910, University of Illinois. *Topics*—Major, Zoology;  
Minors, Zoology, Bacteriology.
- Hookstadt, Carl; Illinois.....219 North Capitol Street  
A.B., 1910, University of Wisconsin. *Topics*—Major, Political  
Science; Minors, Economics, International Law and Diplomacy.
- Judd, Neil Merton; Utah.....626, Y. M. C. A.  
A.B., 1911, University of Utah. *Topics*—Major, Classical Archae-  
ology; Minors, American Archaeology, Geology.

- Keats, Harold; District of Columbia.....2449 18th Street  
A.B., 1912, George Washington University. *Topics*—Major, History; Minors, History, Political Science.
- Lampson, Lawrence Vincent; Ohio.....1333 Otis Place  
A.B., 1906, Oberlin College. *Topics*—Major, Political Science; Minors, English, Education.
- Lenney, John Joseph; Virginia.....1832 Ingleside Terrace  
*Topics*—Major, History; Minors, History, Political Science.
- McAvoy, Catharine Agatha; District of Columbia, 1860 Columbia Road  
A.B., 1908, George Washington University. *Topics*—Major, French; Minors, French, German.
- Macdonald, John Very; Nova Scotia.....748 Gresham Place  
A.B., 1912, Valparaiso University. *Topics*—Major, History; Minors, Philosophy, Education
- Magnusson, Leifur; Minnesota.....1513 Meridian Place  
A.B., 1905, University of Minnesota. *Topics*—Major, Economics; Minors, Sociology, History.
- Mallory, William Johnston; District of Columbia,  
1720 Connecticut Ave.  
M.D., 1903, George Washington University. *Topics*—Major, Physiology and Pharmacology; Minors, Pathology, Chemistry.
- Merrill, Margaret Bell; Vermont.....1735 New Hampshire Ave.  
A.B., 1899, Wellesley College. *Topics*—Major, English; Minor, Education.
- Moneyway, James Louis; Florida.....1454 Fairmont Street  
A.B., 1912, George Washington University. *Topics*—Major, French; Minors, English, English.
- Newbold, Katharine Mitchell; Maryland,  
11 Irving Street, Chevy Chase, Md.  
A.B., 1912, George Washington University. *Topics*—Major, Latin; Minors, Greek, Archaeology.
- Schwartz, Claus Johann; Germany.....3526 11th Street  
A.B. and Teacher's Diploma, 1908, George Washington University. *Topics*—Major, German; Minors, French, Education.
- Scott, Mabel Lavinia; District of Columbia.....1455 Girard Street  
A.B., 1907, George Washington University. *Topics*—Major, English; Minors, German, History.
- Trowbridge, Daisy Ethel; District of Columbia.....1821 H Street  
A.B., 1912, Wellesley College. *Topics*—Major, English; Minors, Philosophy, Economics.
- White, Mary Josephine; Maryland,  
National Park Seminary, Forest Glen, Md.  
*Topics*—Major, English; Minors, German, History.
- Williams, Ashton Hilliard; South Carolina.....201 C Street  
A.B., 1912, University of South Carolina. *Topics*—Major, English; Minors, History, Economics.



## DOCTOR OF PHILOSOPHY

- Alden, Levi Russell; District of Columbia..... 809 L Street  
A.B., 1903, A.M., 1904, LL.B., 1906, George Washington University. *Topics*—Major, History; Minors, Law, History.
- Almy, Lloyd Huber; Illinois..... 1709 17th Street  
S.B., 1909, University of Illinois. *Topics*—Major, Chemistry; Minors, Engineering, Bacteriology.
- Anderson, Hans Wilhelm Ferdinand; Germany, 1435 Massachusetts Ave.  
A.B., 1912, George Washington University. *Topics*—Major, Economics; Minors, Sociology, Psychology.
- Churchill, George Morton; Massachusetts..... 520 E Street N. E.  
A.B., 1896, Boston University; A.M., 1909, George Washington University. *Topics*—Major, History; Minors, Economics, History.
- Cohen, George Grauman; Indiana..... 1230 11th Street  
A.B., 1907, LL.B., 1907, Indiana University. M.Dip., 1912, The George Washington University. *Topics*—Major, International Law; Minors, Sociology, Economics.
- Custis, Horace Hatch; District of Columbia..... The Iroquois  
A.B., 1906, Johns Hopkins University; A.M., 1908, George Washington University. *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology.
- Doyle, Aida Mary; Pennsylvania..... 1359 Park Road  
S.B., 1898, S.M., 1899, George Washington University. *Topics*—Major, Chemistry; Minors, Chemistry, Microscopy.
- Hall, Maurice Crowther; District of Columbia,  
Bureau of Animal Industry  
S.B., 1905, Colorado College; A.M., 1906, University of Nebraska. *Topics*—Major, Zoology; Minors, Zoology, Pathology.
- Huddle, John Thomas; District of Columbia..... 738 11th Street  
A.B., 1891, A.M., 1896, Roanoke College. *Topics*—Major, English; Minors, Psychology, Philosophy.
- Ice, Harry Lawrence; Maryland..... Mt. Rainier, Md.  
A.B., 1912, A.M., 1912, Bethany College. *Topics*—Major, Philosophy; Minors, English, Sociology.
- Jackson, Hartley Harrad Thompson, District of Columbia,  
1326 Euclid Street  
A.B., 1904, Milton College; A.M., 1909, University of Wisconsin. *Topics*—Major, Zoology; Minors, Zoology, Psychology.
- Johnston, Wilmer P.; Virginia..... 142 S Street  
A.B., 1904, Randolph Macon College; B.D., 1908, Vanderbilt University. *Topics*—Major, Philosophy; Minors, History, Sociology.
- Kibler, Thomas Latimer; Virginia..... 1715 35th Street  
A.B., 1904, Randolph Macon College; A.M., 1908, George Washington University. *Topics*—Major, Economics; Minors, History, Sociology.



- Lyon, Marcus Ward; New Jersey.....48 V Street  
B.P., 1897, Brown University; S.M., 1900, M.D., 1902, George Washington University. *Topics*—Major, Zoology; Minors, Neurology, Histology.
- Marshall, Elmer Eugene; District of Columbia.....10 K Street N. E.  
A.B., 1889, Ohio Wesleyan University; S.T.B., 1894, Boston University. *Topics*—Major, History; Minors, Philosophy, Semitics.
- Morse, Elisha Wilson; District of Columbia.....1723 Willard Street  
B.A.S., 1897, Harvard University. *Topics*—Major, Zoology; Minors, History, Economics.
- Palkin, Samuel; District of Columbia.....1736 15th Street  
Ph.B., 1910, Yale University. *Topics*—Major, Chemistry; Minors, Bacteriology, Microscopy.
- Rankin, John Owen; Missouri.....University of Minnesota  
A.B., 1904, Tarkio College; A.M., 1912, George Washington University. *Topics*—Major, Economics; Minors, Political Science, International Law.
- Roark, Ruric Creegan; Kentucky.....1215 Harvard Street  
A.B., 1907, University of Cincinnati; A.M., 1908, University of Illinois. *Topics*—Major, Chemistry; Minors, Bacteriology, Pharmacology.
- Schwartz, Claus Johann; Germany.....3526 11th Street  
A.B. and Teacher's Diploma, 1908, George Washington University. *Topics*—Major, German; Minors, French Education.
- Sniffin, William Webb; District of Columbia.....2625 Garfield Street  
A.B., 1906, A.M., 1907, George Washington University. *Topics*—Major, French; Minors, Spanish, Philosophy.
- Swett, Otis, Dow; Maryland.....1325 H Street  
LL.B., 1891, LL.M., 1892, S.B., 1904, S.M., 1909, George Washington University. *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology.
- Ulke, Titus; District of Columbia.....Patent Office  
Met.E., 1889, Royal Academy of Mines, Freiberg, Saxony; LL.B., 1908, M.P.L., 1909, S.B., 1909, George Washington University. *Topics*—Major, Zoology; Minors, Zoology, Botany.
- Young, (Mrs.) Julia Elektra Ludlow; France..National Cathedral School  
A.B., 1906, Columbia University; A.M., 1909, George Washington University. *Topics*—Major, Greek; Minors, Latin, Archaeology.

### THE COLLEGES

The following list includes all undergraduate students. The registration is indicated by the abbreviations: C. C., Columbian College; Eng., for College of Engineering and Mechanic Arts; C. P. S., for College of Political Sciences\*; T. C. for Teachers College. The letters c.,

\* Merged with Columbian College at the close of the academic year 1912-13.

e., m., and a., after the abbreviation Eng., indicates that the student is a candidate for the bachelor's degree in Civil, Electrical, or Mechanical Engineering, or in Architecture; the absence of these letters indicates a special student.

- Abbott, Ruth Estelle, T. C.; District of Columbia...1308 Spring Road  
 Adams, Vera Elsie, C. C.; District of Columbia.....The Wellington  
     A.B., 1909 George Washington University.  
 Agramonte, Pedro H., Eng. e; New York.....1417 K Street  
     M.E., 1911, Columbia University.  
 Ahern, William John, Eng.; District of Columbia.....1302 T Street  
 Albes, Julia Fredericka, C. C.; Alabama.....1356 Fairmont Street  
 Alden, LeRoy F., Eng.; District of Columbia.....3420 O Street  
 Alexander, Walter Richardson, C. C.; Missouri,  
     1101 Rhode Island Avenue  
 Almon, Harry Foster, Eng.; District of Columbia.....725 11th Street  
 Anders, Walter Lesesne, C. C.; Texas.....708 19th Street  
 Anderson, Henry M., C. C.; District of Columbia.....3030 R Street  
 Anderson, James Francis, Eng.; Ohio.....402 M Street  
 Applebaum, Aaron L., Eng.; N. J.....621 P Street  
 Appleby, Charline Elizabeth, C. C.; Indiana.....The Ramona  
 Appleby, Wilmer Conrad, C. C.; Indiana.....The Ramona  
 Arledge, Caroline Mascott, C. C.; District of Columbia,  
     2628 Garfield Street  
 Arnold, Virginia Josephine, T. C.; District of Columbia,  
     1824 Monroe Street  
 Ashford, Linden Kent, Eng.; District of Columbia....48 Bryant Street  
 Avers, Henry Godfrey, C. C.; Ohio.....8 Fourth Street S. E.  
 Ayler, Ruth L., C. C.; District of Columbia.....244 Eighth St. N. E.  
 Bacon, Seward, C. C.; District of Columbia....2622 Connecticut Ave.  
 Bailey, Marion Prentiss, C. C.; South Carolina.....1208 15th Street  
 Barber, Charles W., Eng. e.; District of Columbia..3428 Brown Street  
 Barnes, Marjorie, C. C.; Maryland.....143 Eleventh Street N. E.  
 Barnum, Walter Livingston, C. C.; Vermont.....412 B Street N. E.  
 Barr, L. Stewart, C. C.; District of Columbia.....The Wyoming  
 Barrett, Samuel Melton, C. C.; District of Columbia,  
     1818 Belmont Road  
 Bashford, Margaret Josepha, T. C.; Virginia,  
     Bashford Road, Alexandria, Va.  
 Baston, George Henry, C. C.; Maine.....2140 N Street  
 Baylies, Lyndon H., C. C.; Nebraska.....603, Y. M. C. A.  
 Bean, Tarleton Smith, Eng.; Pennsylvania..312 Randolph Place N. E.  
 Beekly, Albert L., C. C.; Nebraska.....Geological Survey  
 Beller, Frederick Franklin, C. P. S.; District of Columbia,  
     235 First Street N. E.  
 Beller, Elizabeth Caroline, T. C.; District of Columbia,  
     235 First Street N. E.

Beller, Sadie White, T. C.; District of Columbia

235 First Street N. E.

Beneman, Harry G., C. C.; Maryland.....904 Westminster Street

Bennett, Harry, Eng.; Pennsylvania.....511 Fifth Street N. E.

Benton, Ralph Webster, C. C.; District of Columbia.....462 O Street

Berger, Carey Kingsbury, C. C.; Iowa.....Y. M. C. A.

Best, Joanna Elizabeth, C. C.; District of Columbia, 1133 Euclid Street

Bizzell, Carey, K., C. C.; District of Columbia.....The Burlington

Bjornstad, Arthur Bernard, C. P. S.; Minnesota.....710 19th Street

Black, James, E., C. C.; New York.....1225 O Street

Blanchard, Mabel Elizabeth, C. C.; District of Columbia,

806 Massachusetts Avenue

Boesch, Harry Luther, Eng.; District of Columbia..616 E Street N. E.

LL.B., 1908, George Washington University.

Bontz, Mary Ellen, T. C.; Virginia

422 North Alfred Street Alexandria, Va.

Boone, Pearl Lee, C. C.; Maryland.....Hyattsville, Md.

Bopp, William Elmer, Eng. c.; District of Columbia,

531 10th Street S. E.

Bortman, Isaac Maurice, C. C.; Pennsylvania.....4907 14th Street

Boss, Lewis Hudson, Eng. a.; District of Columbia,

3312 Eighth Street N. E.

Bothwell, Harry Briggs, Eng.; Pennsylvania..420 Fourth Street N. E.

Bowman, John Alexander, C. C.; District of Columbia,

1306 Euclid Street

Boyle, Albert H., C. C.; Montana.....1121 Girard Street

Braddock, Roberta Iola, C. C.; District of Columbia..2620 13th Street

Brame, Arthur H., Eng. e.; District of Columbia.....1217 O Street

Brand, Albert Arnold, Eng. e.; Indiana.....621 19th Street

Bredkamp, Ruth, C. C.; District of Columbia.....Woodridge, D. C.

Breneman, Claude R., C. C.; District of Columbia,

935 New York Avenue

Breuninger, Henry L., Eng. m.; District of Columbia..3208 19th Street

Brewer, Elin Gilmore, C. C.; District of Columbia....608 Mass. Avenue

Brigham, Gertrude R., C. C.; Massachusetts.....Smithsonian Institute

Brock, Walter Burritt, C. C.; District of Columbia, 2120 Conn. Avenue

Brockwell, John, C. C.; North Carolina.....1259 Morse Street, N. E.

Brown, Alvin McCreary, C. C.; Maryland.....Berwyn, Md.

Brown, Ammi, C. P. S.; Colorado.....5 B Street

A.M., 1902, Harvard University.

Brown, Mary, T. C.; District of Columbia.....2464 Ontario Road

Brown, Wager Swayne, Eng.; District of Columbia,

Apt. 2, 1475 Col. Rd.

Browne, Gertrude Veronica, T. C.; District of Columbia

1121 Girard Street

Browne, Margaret Marian, C. C.; District of Columbia,

1340 Girard Street



- Browning, Martha Ringgold, C. C.; District of Columbia,  
707 East Capitol Street
- Buchanan, Omar Bailey, Eng. e.; District of Columbia....901 M Street
- Bull, Wilfrid Douglas, C. P. S.; California.....1627 19th Street
- Bullion, Clarence Leroy, Eng.; Ohio.....4434 Kansas Avenue  
LL.B. 1912, George Washington University.
- Bullough, George VanNess, C. C.; District of Columbia,  
122 Tennessee Avenue
- Burchard, Edwin Day, Eng. c.; District of Columbia.....1113 S Street
- Burden, Katherine, C. C.; District of Columbia, 1237 Crittenden Street
- Burdette, Walter W., C. C.; Virginia,  
R. F. D. No. 4, Station "A" Washington, D. C.
- Burean, Elmer J., C. P. S.; Michigan.....2024 F Street
- Burgess, James Irving, Eng.; District of Columbia,  
403 Eleventh Street S. E.
- Burke, Ellen Teresa, C. C.; District of Columbia,  
531 Jefferson Street, Brightwood Park, D. C.
- Burns, John Carter, C. C.; Pennsylvania...1129 New Hampshire Ave.
- Burritt, Alice, C. C.; District of Columbia.....The Cliffborne
- Burt, Edwin Caleb, C. C.; District of Columbia, 1102 Vermont Avenue
- Bush-Brown, James, C. C.; District of Columbia.....1729 G Street
- Caemmerer, Johannes Paul, C. C.; Wisconsin.....925 L Street
- Caffrey, Charles Rogers, Eng.; District of Columbia...5801 14th Street
- Callahan, Charles Aubrey, Eng. c.; Virginia  
213 South Fairfax Street Alexandria, Va.
- Callander, William F., C. P. S.; Illinois.....4129 9th Street
- Cam, Helen Elizabeth, T. C.; District of Columbia.....58 T Street
- Campbell, Arthur B., Eng. c.; Missouri, 24 Rhode Island Avenue N. E.
- Carden, Samuel Poe, C. C.; Texas.....1229 O Street
- Carpenter, Clarence Forrest, Eng. a.; Indiana.....601 Y. M. C. A.
- Carpenter, Lillian Evans, T. C.; District of Columbia, 205 D Street N. E.
- Carter, Francis Edward, C. C.; Virginia.....Episcopal High School
- Carter, Scott, Eng.; Indiana.....3351 Mt. Pleasant Street
- Cash, Edith Katherine, C. C.; District of Columbia,  
126 Tennessee Avenue N. E.
- A.B. 1912, George Washington University.
- Chamberlin, Pierre Audrey, C. P. S.; District of Columbia, 1323 M Street
- Chaney, Orilla C., C. C.; District of Columbia.....The Plymouth
- Chapin, Mabel Louise, C. C.; District of Columbia,  
132 Kentucky Avenue S. E.
- A.B. 1912, George Washington University.
- Chapman, John Holbrook, Eng. m.; District of Columbia,  
3323 Wisconsin Avenue
- Cheney, Edith, C. C.; District of Columbia.....816 Taylor Street
- Cheston, Goeffrey H., C. C.; New York.....U. S. Botanic Garden
- Chidester, Orpha Arlington, Eng. e.; West Virginia...1121½ 12th Street  
A.B., 1910; A.M., 1910, Washington and Lee University.



- Church, Grace Ella, C. C.; Virginia ..... Cherrydale, Va.  
 Claytor, Spry Owen, C. C.; Ohio ..... 1504 Columbia Road  
 Clevenger, Florida Frances, C. C.; District of Columbia,  
     2411 Pennsylvania Avenue  
 Cochran, John Edward Walker, Eng. c.; District of Columbia,  
     Imperial Apartment House  
 Coe, Mayne R., C. C.; District of Columbia... 2947 Mills Avenue N. E.  
 Cohen, Maurice, C. P. S.; District of Columbia ..... 408 26th Street  
 Cokinos, Philip Dionysius, C. C.; Greece ..... 924 9th Street  
 Cole, Charles S., C. P. S.; Iowa ..... 5315 8th Street  
 Coleman, Richard Donaldson, C. P. S.; District of Columbia,  
     1003 M Street S. E.  
 Collins, Philip LeRoy, Eng.; District of Columbia, Library of Congress  
 Collins, William Moore, C. C.; District of Columbia... 1218 Euclid Street  
 Conboye, William T., Eng. a.; California ..... 311 M Street  
 Conner, Lulu Elizabeth, C. C.; District of Columbia.... 12 Iowa Circle  
     A.B., 1908, George Washington University.  
 Cook, J. Leslie, C. C.; District of Columbia ..... 1626 Monroe Street  
 Cook, James Williamson, C. C.; District of Columbia, 213 2d Street S. E.  
 Coon, Nina Graves, C. C.; District of Columbia ..... 1525 O Street  
 Copeland, Leland S., C. C.; Missouri ..... 1114 Euclid Street  
 Corbett, Katherine C., C. C.; District of Columbia, 1411 Harvard Street  
 Corning, Edward Burton, Eng. a; District of Columbia... 122 V Street  
 Cornwell, Lillian Myrtle, C. C.; Virginia ..... Great Falls, Va.  
 Cost, Arlinton Boone, C. C.; Maryland ..... 1830 G Street  
 Cost, Roscoe Wyand, Eng.; Maryland ..... 1323 10th Street  
 Crabtree, John Hinton, C. P. S.; Oklahoma; 1734 Pennsylvania Avenue  
 Craton, Anna Washington, C. C.; North Carolina, 1346 Fairmont Street  
 Craton, Richard Washington, Jr., Eng.; North Carolina,  
     1346 Fairmont Street  
 Crittenden, Alene Letitia, C. C.; District of Columbia, 1350 Irving Street  
 Crook, Florence C., C. C.; District of Columbia,  
     3413 13th Street, Brookland, D. C.  
 Cullom, Edward, C. C.; Tennessee ..... 1830 H Street  
     A.B., University of Nashville, 1904; A.M., 1910, George Wash-  
     ington University.  
 Cummingford, Asa Norman, Eng.; Michigan ..... 1223 D Street S. E.  
 Cunningham, Julian Wallace, C. C.; District of Columbia,  
     1636 Monroe Street  
 Curl, Grace Irene, T. C.; District of Columbia .... 3658 Warder Street  
 Dans, José P., Eng. c.; Philippine Islands ..... 2122 H Street  
 Dashiell, Emily Rose, T. C.; Maryland ..... Library of Congress  
 Davis, Minnie Carter, C. C.; Tennessee ..... 218 F Street N. E.  
 Davis, William Jones, Jr., C. C.; District of Columbia, 3433 14th Street  
 Davison, Ruth Lowe, T. C.; District of Columbia ... 1437 Girard Street  
 Deal, Roy Linney, Eng. a.; North Carolina ..... Clarendon, Va.  
     A.B., 1911, George Washington University.

- Degenhardt, George Albert, Eng. c.; Pennsylvania.....911 23d Street  
 Degnan, George A., Eng. c.; Pennsylvania.....450 M Street  
 Delany, James Leroy, Eng.; Ohio.....600 Park Road  
 De Long, Forrest Allen, Eng.; Pennsylvania.....607 8th Street N. E.  
 Denison, Harriet Alberta, C. C.; District of Columbia..3117 35th Street  
 Dent, Mary Catherine, T. C.; District of Columbia.....3009 P Street  
 Dessez, Charlotte Caroline, T. C.; District of Columbia,  
 1417 Belmont Street  
 DeVaughan, William Aloysius, Eng.; Virginia.....Alexandria, Va.  
 Deysher, Edgar F., C. C.; New Jersey.....1416 A Street N. E.  
 S.B., 1907, Pennsylvania State College.  
 Diesman, Justin P., C. C.; Kentucky.....452 K Street  
 Dolliver, Garrett Brown, C. C.; South Dakota.....Y. M. C. A.  
 Doran, Helen, C. C.; District of Columbia.....2712 27th Street  
 Dorr, George W., C. C.; Maryland.....Hyattsville, Md.  
 Drake, Alice Hutchinds, C. C.; District of Columbia..1632 Riggs Place  
 Draper, Anne Elizabeth, C. C.; New York.....Bureau of Chemistry  
 Dulac, Hilda North (Mrs.), T. C.; District of Columbia, 1226 15th Street  
 Dulac, Victor, C. C.; District of Columbia.....1226 15th Street  
 Dunwoody, Halsey, C. C.; District of Columbia.....1522 31st Street  
 Graduate, 1905, United States Military Academy.  
 Dutton, Donald Langley, Eng. c.; District of Columbia,  
 1721 Kilbourne Place  
 Duvall, James, C. P. S.; District of Columbia...2513 Wisconsin Avenue  
 Duvall, Walker M., Eng. e.; District of Columbia.....1831 M Street  
 Dwyer, J. Rochford, Eng. c.; District of Columbia..628 F Street S. W.  
 Earl, Donald Montgomery, C. C.; Maryland, Department of Agriculture  
 Earnest, Mildred, T. C.; District of Columbia.....1348 Newton Street  
 Eddingfield, Ina Dean, T. C.; District of Columbia,  
 1440 Harvard Street  
 Egbert, Freda Dorothy, T. C.; District of Columbia..1739 First Street  
 Eiker, Fillmore Winkopp, Eng. c.; Maryland, 6312 Connecticut Avenue  
 Eiker, Mattie, C. C.; District of Columbia.....1006 Otis Place  
 Eldridge, Hattie Dayton, T. C.; North Carolina.....The Wellington  
 Eliason, Raymond Orlando, Eng.; District of Columbia,  
 214 4th Street S. E.  
 Elwood, William A., Eng. c.; New York.....119 C Street N. E.  
 Engel, Abraham, C. C.; New York.....511 K Street N. E.  
 Ensign, Hattie Mae Dickson, C. C.; Colorado.....4809 Iowa Avenue  
 Erikson, Bernhard Edwin, C. C.; Illinois.....706 20th Street  
 Evans, Florence Elizabeth, C. C.; Ohio.....205 D Street N. E.  
 Everett, John Ridden, T. C.; Minnesota.....1224 13th Street  
 Fant, Jessie DuBois, T. C.; District of Columbia...115 12th Street S. E.  
 Farmer, Mary Caroline, C. C.; North Carolina.....154 A Street N. E.  
 Farwell, Clarence Gilbert, C. C.; Massachusetts.....Y. M. C. A.  
 A.B., 1910, George Washington University.  
 Faunce, Mary E., C. C.; District of Columbia...317 11th Street S. W.

- Faye, James Jacob, Eng. m.; New York.....54 Bryant Street  
 Feldstein, Leonard, T. C.; Pennsylvania.....929 Westminster Street  
 S.B., 1906, University of Pennsylvania.  
 Ferguson, Elizabeth, T. C.; District of Columbia...1239 Kenyon Street  
 Ferguson, Marion Frances, C. C.; District of Columbia,  
 1239 Kenyon Street  
 Field, Luella, C. C.; District of Columbia.....1934 Calvert Street  
 Finch, Elmer Harrison, C. C.; Michigan.....U. S. Geological Survey  
 Fisher, Lewis Civile, C. P. S.; Maryland.....1769 Columbia Road  
 Fitzhugh, Ethel Virginia, C. C.; District of Columbia, 124 12th Street S. E.  
 Fleming, John Paton, C. C.; Virginia .....1861 Wyoming Avenue  
 Fogle, Fred M., Eng. c.; District of Columbia...1100 Vermont Avenue  
 Fordney, Chester Lawrence Michael, C. C.; Michigan.....The Dewey  
 Francis, Grace, C. C.; District of Columbia.....1833 California Street  
 Frank, Mary Woods, T. C.; District of Columbia .....1003 Otis Place  
 Frazier, Elmer Sefton, C. P. S.; District of Columbia.....125 S Street  
 Frederick, Alfred Hardin, C. C.; Texas .....1345 Vermont Avenue  
 Freemire, Leroy H., Eng.; New York.....1209 O Street  
 Frizzell, Genevieve Margaret, T. C.; District of Columbia,  
 241 8th Street N. E.  
 Gabriel, Henry Leo, C. P. S.; Ohio.....712 20th Street  
 Galbraith, Esther Elizabeth, C. C.; Pennsylvania, 3425 14th Street N. E.  
 Galbraith, Robert Karl, Eng.; Pennsylvania.....1735 First Street  
 Galloway, Alfred E., C. C.; Ohio.....1741 G Street  
 Garrett, William Ashton, Eng.; Maryland.....2300 18th Street  
 Gatchell, Marie Ellen, C. C.; District of Columbia....1736 Park Road  
 Gerhart, Herbert B., C. P. S.; Pennsylvania.....907 23d Street  
 B.L., 1911, George Washington University.  
 Gerrick, John, C. C.; District of Columbia....701 McLachlin Building  
 Gershanick, Jeanette, C. C.; District of Columbia.....206 G Street  
 Giantvalley, Earl A., C. C.; Minnesota .....National Museum  
 Gibbs, Kate Marie, T. C.; Massachusetts .....1216 S Street  
 Gleason (Mrs.), Mamie Martin, T. C.; Virginia,  
 Cherrydale, Rural Station, Washington, D. C.  
 Goding, Anna M., T. C.; Massachusetts.....1419 R Street  
 Goodman, Leopold A., C. C.; Massachusetts .....488 E Street S. W.  
 Goetz, Mina, C. C.; District of Columbia .....3846 Woodley Road  
 Gore, Michael Alvord, C. C.; District of Columbia,  
 1147 New Hampshire Avenue.  
 Gorman, Alexander, C. C.; District of Columbia..1729 Kilbourne Place  
 Gottschall, Andrew William, C. C.; Pennsylvania,  
 201 Anacostia Avenue, Benning, D. C.  
 Graham, Edgerton Goldsborough, Eng.; District of Columbia,  
 616 Keefer Place  
 Grandfield, Helen McKee, C. C.; District of Columbia....949 S Street  
 Green, Elsie Eugenia, C. C.; District of Columbia.....600 23rd Street  
 Greene, Elbridge Gerry, C. P. S.; Massachusetts.....1821 Eye Street



- Griffith, Alice Eleanor, C. C.; District of Columbia..1846 Ontario Place  
 Grosbach, Homer E., Eng.; Nebraska.....1007 13th Street  
 Groscup, Arthur Wells, C. C.; Maryland.....Woodside, Md.  
 Gsantner, Otto Carl, Jr., C. C.; District of Columbia,  
     2811 24th Street N. E.  
 Hafford, Thomas A., Eng. c.; New York.....1215 O Street  
 Haines, Elvans Diehl, Eng.; District of Columbia.....1340 R Street  
 Haines, Margaret, C. C.; Pennsylvania .....922 19th Street  
 Hall, Walter J., C. C.; New York.....128 C Street N. E.  
 Halsey, Arthur Sherman, Eng. m.; Pennsylvania, 207 East Capitol Street  
 Halsted, John Pennington, Eng. e.; Massachusetts.....The Albemarle  
 Hamlin, Herbert Samuel, C. C.; Utah.....1100 Vermont Avenue  
 Handelsman, Samuel, C. C.; New York .....808 H Street  
 Hampton, Lucy J., C. C.; Oklahoma.....1705 17th Street  
 Hanson, Frank Blair, C. C.; District of Columbia, 710 Rhode Island Ave.  
 Hanvey, Edna E., C. C.; District of Columbia ... 1315 Emerson Street  
 Hardy, Margaret Boude, C. C.; District of Columbia,  
     812 East Capitol Street  
 Hardy, Rose L., C. C.; District of Columbia.....812 East Capitol Street  
 Harkness, Arthur Williams, C. C.; District of Columbia..2224 F Street  
 Harriman, Oliver Bishop, C. P. S.; Virginia.....1725 H Street  
 Harrison, Arthur P., C. C.; District of Columbia, Takoma Park, D. C.  
 Harrison, Robert Horace, Eng.; District of Columbia, 2208 First Street  
     S.B. in C.E., 1912, George Washington University.  
 Harsch, Erwin, Eng. c.; Ohio .....1318 Maryland Avenue N. E.  
 Hart, Raymond Sager, Eng. a.; District of Columbia..22 The Hoffman  
 Harter, Eugene Claudius, C. P. S.; Ohio .....923 12th Street  
 Hartung, William Kenneth, C. C.; District of Columbia,  
     1337 Harvard Street  
 Hastings, Gertrude, C. C.; District of Columbia ....905 B Street N. E.  
 Hatfield, Harold De Wolfe, Eng. m.; District of Columbia, 1822 H Street  
 Hauke, Rilla M., C. C.; District of Columbia,  
     605 Massachusetts Avenue N. E.  
 Hawbaker, Claude Clifford, C. P. S.; Michigan.....338 8th Street S. E.  
 Hazlett, Sylvia Jane, C. C.; Pennsylvania .....2107 S Street  
 Heald, Roy Haines, Eng. m.; Nebraska .....2734 Sherman Avenue  
 Hearne, Susan Snell, C. C.; Missouri .....1307 P Street  
 Hecht, Max, C. C.; New York .....1206 Girard Street  
 Heider, Anna L., C. C.; District of Columbia..943 Westminster Street  
 Heindl, Raymond, A., Eng. e.; Wisconsin.....1006 11th Street  
 Heine, Henry, W., Eng. m.; District of Columbia,  
     502 Rhode Island Avenue  
 Hellman, Dorothy, T. C.; District of Columbia, 2804 Cathedral Avenue  
 Hellman, Florence S., C. C.; Wyoming.....2804 Cathedral Avenue  
 Henckels, Theodora Katherine, C. C.; District of Columbia,  
     3614 Newark Street



- Henderson, Robert Edgar, C. C.; District of Columbia,  
1507 Meridian Place
- Henry, Candor C., C. C.; Tennessee.....2036 F Street
- Herndon, Neal Norton, Eng. m.; Alabama.....1515 Vermont Avenue
- Heron, Louis Mann, Eng. e.; District of Columbia....1322 14th Street
- Hicks, R. E., C. C.; Maryland.....Rockville, Md.
- Hidnert, Peter, Eng.; New York.....1136 8th Street
- Hobbs, Ewart William, C. P. S.; Illinois.....1370 Perry Place
- Hobbs, Virginia, C. C.; West Virginia.....The Cumberland
- Hobgood, Katharine White, T. C.; Louisiana.....3631 10th Street
- Hodgkins, Harry Grant, Jr., Eng.; Maryland.....Bethesda, Md.
- Hodgkins, Howard Wilkinson, Eng. c.; District of Columbia,  
1830 T Street
- Hoffman, Edwin Summer, Eng. e.; Pennsylvania,  
1007 Massachusetts Avenue N. E.
- Hoffman, Henry B., C. C.; District of Columbia..1120 7th Street N. E.
- Hollister, Mabel Pfrimmer, C. C.; Arkansas.....1338 Oak Street
- Holmes, Osgood, Eng.; District of Columbia.....1425 Belmont Street
- Holmes, Thomas N., Eng.; South Carolina.....Y. M. C. A.
- Horn, Arthur, C. C.; Illinois.....1017 12th Street
- Hospital, Ralph, C. C.; District of Columbia.....Brookland, D. C.
- Houghton, Carlos, C., C. C.; District of Columbia, 2011 Kalorama Road
- Hoult, Geneva Frances, C. C.; Illinois.....New Varnum Hotel
- Huff, Daisie Ione (Mrs.) T. C.; District of Columbia,  
2134 F Street, Apartment 1W
- Huff, Elkanah Wynn, Eng. c.; Colorado.....The Lester
- Hughes, Anna S., C. C.; District of Columbia..426 Fourth Street N. E.
- Hughes, Lotus Graham, C. P. S.; West Virginia.....541 21st Street
- Hughes, Mildred May, C. C.; District of Columbia, 218 6th Street S. E.
- Hughes, William G., Eng. m.; District of Columbia,  
The Eutaw Apartment
- Hull, Flora, C. C.; District of Columbia .....The Iowa
- Hummer, Elizabeth A., C. C.; District of Columbia,  
812 E. Capitol Street
- Hunsinger, Belford E., C. C.; Ohio.....151 Highland Terrace
- Hunt, Estelle J., C. C.; Texas.....9 B Street
- Hunt, John Stuart, C. P. S.; Texas.....1100 Vermont Avenue
- Hunt, Paul Jamison, C. C.; District of Columbia....1204 Girard Street
- Hunter, Rosser Lee, Jr., C. C.; District of Columbia, 1340 A Street S. E.
- Hurd, Willis L., C. C.; District of Columbia.....1515 T Street
- Hurley, Lawrence David, Eng. c.; District of Columbia,  
1225 Irving Street
- Ingram, Charlton Weber, Eng. m.; District of Columbia,  
713 Taylor Street
- James, William Stubbs, Eng. m.; Massachusetts.....1504 R Street
- Jarboe, Edith, C. C.; District of Columbia,  
633 Massachusetts Avenue N. E.

Jeffrey, Earl Munro, C. C.; Wisconsin.....3124 Wisconsin Avenue  
 Jeffrey, Warren Perry, Eng. c.; Washington.....1502 Vermont Avenue  
 Jeffries, John Miller, C. C.; District of Columbia, 2148 Wyoming Avenue  
 Johnson, Bert D., C. C.; District of Columbia.....1926 Eye Street  
 Johnson, Charles Albert, T. C.; District of Columbia, 2837 12th Street  
 Johnson, Gladys Wheatley, C. C.; District of Columbia,

Ashby Street and Conduit Road

Johnston, Mildred Floyd, C. C.; District of Columbia,

1650 Monroe Street

A.B., 1909, George Washington University.

Jones, Anna Rosabelle, C. C.; District of Columbia,

412 11th Street N. E.

Jones, Hannah M., T. C.; Ohio.....2013 G Street

A.B., 1908, Wellesley College.

Jones, James Lyons, Eng. e.; Pennsylvania.....818 Allison Street

Judd, Edwin E., C. P. S.; New York.....15 Todd Place N. E.

Kain, Helen Gladys, C. C.; District of Columbia.....129 E Street

Kaiser, Edw. J., Eng.; District of Columbia.....331 13th Street S. E.

Karger, Theresa, C. C.; District of Columbia....2616 Cathedral Avenue

Katz, Charles Vernon, Eng.; New York.....923 M Street

Kaulbeck, Clarence L., C. P. S.; Pennsylvania.....730 Taylor Street

Kause, Robert Lincoln, Eng. c.; Ohio.....1905 Jackson Street N. E.

Keister, James Lewis, Eng.; District of Columbia..1711 Seventh Street

Kellberg, Ira N., C. C.; District of Columbia.....1914 Calvert Street

Kelley, Eva Phelps, C. C.; Maryland,

122 Baltimore Avenue, Takoma Park, D. C.

Kelley, John Nicholas, Jr., C. C.; Maryland.....Garrett Park, Md.

Kellogg, Lucien T., C. P. S.; Washington....1314 Connecticut Avenue

Kelly, Charles Frayer, C. C.; Michigan,

2628 Myrtle Avenue, Woodridge, D. C.

Kemmerer, Charles T., C. C.; Iowa,

Apartment 32, The Newry, 1115 8th Street

Ph.B., 1903, University of Iowa.

Kent, Henry J., Eng. e.; District of Columbia, 3145 Mt. Pleasant Street

Kerby, Florence Marcellina, C. C.; District of Columbia..2606 L Street

Kerby, Katherine, C. C.; District of Columbia.....2606 L Street

Kersey, Virginia, C. C.; District of Columbia, 1324 Massachusetts Ave.

Kimball, Henry Frankland, C. P. S.; District of Columbia,

4324 14th Street

King, Edith Haynes, C. C.; Ohio.....918 M Street

King, Myrtle Virginia, T. C.; District of Columbia, 328 10th Street N. E.

Kingsbury, Joseph B., C. P. S.; Iowa.....Y. M. C. A.

Kingsbury, Orrin Dean, Eng.; Iowa.....412 Y. M. C. A.

Kinsell, Rex Emir, C. C.; Iowa.....1335 Massachusetts Avenue S. E.

Kirk, Theodore T., Eng. c.; Kentucky.....2134 F Street

Klager, Karoline, C. P. S.; Michigan.....1314 Park Road

Kluge, Russell O., Eng.; New York.....2009 2d Street

- Knowles, Margaret Morton, T. C.; District of Columbia,  
132 R Street, N. E.
- Knudtson, Clarence A., C. C.; Wisconsin.....610 22d Street
- Koetz, Katherine, Eng. a.; Pennsylvania.....1323 Park Road
- Kothe, Charles, T. C.; New York.....1115 M Street
- Kramer, Miriam, C. C.; District of Columbia.....634 A Street S. E.
- Kruger, Henry Alexander, Eng.; District of Columbia,  
726 9th Street S. E.
- Kuehn, Herman A., Eng. c.; Indiana.....411 P Street
- La Follette, Clara C., C.; Washington.....1825 California Avenue
- Lansche, Hattie M., C. C.; District of Columbia.....1012 N Street
- Larson, August Einar, Eng. m.; Sweden.....1730 18th Street
- Lasier, Emery L., Eng.; New Hampshire.....1427 Girard Street
- A. B., 1911, George Washington University.
- Lasier, Harriet Catherine, C. C.; New Hampshire...1427 Girard Street
- Lawson, Margaret Lucile, T. C.; District of Columbia,  
206 13th Street N. E.
- Lazarus, I. Burt, C. P. S.; Massachusetts.....2026 F Street
- Lee, William Canfield, C. C.; Kansas.....Department of Agriculture
- Leland, Florence Ruth, C. C.; District of Columbia,  
206 5th Street S. E.
- Leland, Leonard Jesse, Eng.; New York.....206 5th Street S. E.
- Lenney, John Joseph, C. P. S.; Virginia,  
Apartment 101, The Atherton, 2112 F Street
- Leonard, Lewis Thompson, C. C.; District of Columbia,  
520 G Street N. E.
- Leonard, William M., Eng. e.; Pennsylvania.....520 G Street N. E.
- Lepper, Henry Albert, C. C.; District of Columbia.....1620 6th Street
- Lewis, Allen Daniels, Eng. m.; New Jersey.....1800 8th Street
- Lewis Max E., C. C.; District of Columbia.....801 21st Street
- Lindsey, Irving, Eng. c.; Virginia..1009 Gibbon Street, Alexandria, Va.
- Lind, Ida May, T. C.; Iowa.....4516 14th Street
- Lindsey, Alfred B., C. C.; District of Columbia.....2550 14th Street
- Litchfield, Henry Edward, Eng.; District of Columbia,  
308 L Street S. E.
- Livesay, Fannie Ellen, C. C.; District of Columbia,  
1104 8th Street S. E.
- Llufrio, Ethel, C. C.; District of Columbia.....618 8th Street N. E.
- Lodholz, Louis, C. C.; Pennsylvania.....Y. M. C. A.
- Lockwook, Jane Girvan, T. C.; District of Columbia,  
Box 227, R. F. D. No. 4, Washington, D. C.
- Lockwood, Margaret Mary, T. C.; District of Columbia,  
Box 227, R. F. D. No. 4, Washington, D. C.
- Louis, HsiaoMin, C. P. S.; China.....Chinese Legation
- A. M., College of Languages, China.
- Love, Rebecca Laurence, C. C.; District of Columbia,  
910 Massachusetts Avenue



- Lowe, Henry Burton, C. C.; Virginia.....215 5th Street N. E.  
 Lowry, Mary Katharine, T. C.; Maryland,  
     27 West Irving Street, Chevy Chase, Md.  
 Luckings, Harry C., C. C.; New Jersey.....508 7th Street N. E.  
 Luthi, Frederic, C., C. P. S.; Switzerland.....918 19th Street  
 Lynch, James Joseph, C. P. S.; Massachusetts.....1206 10th Street  
 McAvoy, Charles A., C. C.; District of Columbia...1860 Columbia Road  
 McCabe, Lulu Mignonne, C. C.; Kansas.....3469 14th Street  
 McCleary, Dorothy, C. C.; District of Columbia.....217 Eye Street  
 McConkey, Mont, C. C.; Montana.....Office Indian Affairs  
 McCormack, Joseph, C. P. S.; Pennsylvania.....2002 G Street  
 McCormick, John D., Eng. c.; District of Columbia,  
     1377 North Carolina Avenue N. E.  
 Macdonald, John Very, T. C.; Nova Scotia.....48 Gresham Place  
     A.B., 1912 Valparaiso University.  
 Mac Farlane, Nellie Rae, T. C.; District of Columbia....2002 G Street  
 McGill, Marie Cecilia, T. C.; District of Columbia,  
     602 Tennessee Avenue N. E.  
 McKee, Mary Therese, T. C.; District of Columbia.....2123 K Street  
 McKnew, Donald Harrison, C. C.; District of Columbia,  
     The Burlington  
 McKnew, Jane Marion, T. C.; District of Columbia,  
     1401 Columbia Road  
 McKnight, Anna Lelia, C. C.; District of Columbia, 238 8th Street N. E.  
 McLaughlin, De Witt Terheron, C. C.; Texas.....1359 Spring Road  
 Magie, Hazel, C. C.; Maryland.....Bethesda, Md.  
 Magoffin, Dorothy, C. C.; District of Columbia....1489 Newton Street  
 Magruder, Oliver Graham, Eng. c.; District of Columbia,  
     765 Quebec Street  
 Marks, Joseph, Eng. c.; Pennsylvania.....903 F Street N. E.  
 Marlow, Stuart L., C. P. S.; District of Columbia....3172 17th Street  
 Marsden, Thomas James, Eng. c.; District of Columbia,  
     701 E Street S. W.  
 Martin, Frank W., Eng. c.; District of Columbia....119 2d Street N. E.  
 Martin, Ralph, Eng.; Rhode Island.....Carlisle Court  
 Marvin, Francis Edwin, Eng. e.; New York.....606 F Street N. E.  
 Maryman, J. Edgar, C. C.; District of Columbia,  
     1304 Emerson Street N. E.  
 Mason, Charles Summer, Eng. a.; District of Columbia....1747 F Street  
 Mason, Josephine Dwight, T. C.; Massachusetts,  
     1348 Euclid Street, The Roanoke  
 Mason, Samuel Worcester, Eng. e.; Virginia.....308 B Street N. E.  
 Maxson, Louis Archer, C. C.; Maryland.....Y. M. C. A.  
 Mayfield, John Preston, Eng. c.; District of Columbia,  
     1912 Biltmore Street  
 Meader, Carl, Eng. c.; Maine.....23 First Street N. E.  
 Meany, Lloyd Emmart, Eng. c.; District of Columbia....908 23d Street



- Meese, Norman S., C. C.; New York.....1601 15th Street  
 Mehurin, Roger Melville, C. C.; District of Columbia...1305 10th Street  
 Mentzer, Florence Eberly, C. C.; Pennsylvania,  
     605 North Carolina Avenue S. E.  
 Merritt, Leonard Atkins, C. P. S.; Minnesota.....154 F Street S. E.  
 Middleton, Herbert Paul, Eng. c.; New York.....The Ardmore  
 Miller, Annette Searle, C. P. S.; District of Columbia,  
     13 10th Street N. E.  
 Miller, Odver H., Eng. a.; Kansas.....1312 Fairmont Street  
 Milliken, Florence Ethel, T. C.; District of Columbia....468 P Street  
 Miner, Helen, C. C.; Ohio.....1212 L Street  
 Mitchell, John LeRoy, Eng. m.; Pennsylvania.....1241 B Street S. E.  
 Mizell, Joseph Zachary, C. C.; Florida.....Treasury Department  
 Moffat, Curtis, C. P. S.; New York.....1725 H Street  
 Monk, Ella May, T. C.; New York....902 Massachusetts Avenue N. E.  
 Moore, Kate Carroll, C. C.; District of Columbia....2024 15th Street  
     A.B., 1912, George Washington University.  
 Moore, Milton Donaldson, C. C.; South Carolina,  
     Department of Agriculture  
 Moote, Nellie D., T. C.; New York.....1348 Euclid Street  
 Moreland, John Edwin, Eng. e.; District of Columbia,  
     Chevy Chase, D. C.  
 Morrison, Helen M., C. C.; District of Columbia..1957 4th Street N. E.  
 Morrison, Hugh Shannon, Eng.; Maryland  
     Station H, R. F. D. No. 1, Washington, D. C.  
 Morse, Wilson, Eng.; Massachusetts.....1723 Willard Street  
 Moyer, Florence W., C. C.; District of Columbia...610 8th Street N. E.  
 Muench, Elsa Dorothea, C. C.; District of Columbia....307 C Street  
 Mulford, (Mrs.) Bessie Boyd, T. C.; District of Columbia  
     3014 Dent Place  
 Muncey, Eliot M., C. C.; District of Columbia.....2006 F Street  
 Murlin, Don Elbert, Eng. e.; District of Columbia.1874 Monroe Street  
 Murray, Thomas P., Eng. c.; Massachusetts,  
     1108 New Hampshire Avenue N. W.  
 Nash, James Philip, Eng. c.; Pennsylvania.....1100 Vermont Avenue  
 Nash, Martha Virginia, T. C.; Virginia.....Manassas, Virginia  
 Neale, Ronald Beaman, C. P. S.; District of Columbia...The Woodley  
 Needham, Arthur E., C. C.; Massachusetts.....War Department  
 Nellis, William L., C. P. S.; Ohio.....Y. M. C. A.  
 Neuman, Fredericka, C. C.; District of Columbia....701 A Street S. E.  
 Newburgh, Frederic, Eng.; Wisconsin.....1421 Columbia Road  
     LL.B., University of Wisconsin; LL.M., National University.  
 Nichols, Helen Gilman, T. C.; District of Columbia,  
     2604 University Place  
 Nickels, Edward Bilmer, Eng. m.; District of Columbia,  
     122 Florida Avenue

- Nielsen, Fred K., C. C., University of Nebraska; Nebraska,  
720 19th Street
- Niess, Edwin Mark Carvell, C. C.; District of Columbia,  
61 Rhode Island Avenue
- Noonan, Thomas W., Eng.; District of Columbia, 1331 Vermont Avenue
- Norris, Dorris Helen, C. C.; District of Columbia...35 Q Street N. E.
- Norton, Frederick Aloysius, C. C.; Massachusetts, Bureau of Chemistry
- Ober, George Clarke, C. C.; District of Columbia...125 B Street S. E.
- O'Donnell, Ruth L., C. C.; District of Columbia...1207 F Street N. E.
- O'Rourke, Francis Joseph, Eng.; Rhode Island...623 19th Street
- Ossire, Cora Amelia, T. C.; District of Columbia...2729 Ontario Road
- Outwater (Mrs.), Kate Sorrell, T. C.; District of Columbia,  
620 F Street S. W.
- Owens, Walter Jefferson, C. C.; Kentucky.....Newport Apartment
- Paine, Janet Eleanor, C. C.; District of Columbia....4603 13th Street
- Papa, Joseph M. A., Eng. c.; Italy.....Wesley Chapel
- Parks, Charles Webb, C. C.; District of Columbia....2463 6th Street
- Parks, George Edward, C. C.; District of Columbia....2463 6th Street
- Parris, Morris Addison, C. C.; District of Columbia.....3022 P Street
- Passmore, Senes Breton, Eng.; Pennsylvania,  
650 Massachusetts Avenue N. E.
- Patrick, Ermin Chambers, Eng.; District of Columbia,  
600 23d Street N. W.
- Patterson, Ruth Capelle, T. C.; District of Columbia..2016 15th Street
- Paul, Mabel Spencer, C. C.; District of Columbia, 3537 Holmead Place
- Paul, Walter Edwin, C. C.; Illinois.....3537 Holmead Place
- Paynter, Vernon E., C. C.; Virginia.....The Cairo
- Peck, Allen Eugene, Eng. m.; District of Columbia,  
1448 Fairmont Street
- Penagos y R., Arcesis, C. P. S.; Columbia.....Columbia Legation
- Pendleton, Agnes Louise, T. C.; District of Columbia...901 M Street
- Perry, Emily Kershaw, C. C.; District of Columbia...Florence Court
- Peter, Alan Mary, C. C.; Maryland.....Kensington, Md.
- Peterson, Frank D., Eng. c.; Illinois.....517 Y. M. C. A.
- Phillips, George Washington, C. C.; District of Columbia, 612 18th Street
- Phillips, Marc, Eng.; Virginia.....1360 Irving Street
- Pidgeon, C. Chandlee, C. C.; District of Columbia, 1207 Harvard Street
- Pierce, Sara, C. C.; District of Columbia.....1350 Oak Street
- Piper, Edgar Raymond, Eng. a.; Connecticut.....2106 F Street
- Plank, Mildred Marion, C. C.; Nebraska.....115 5th Street, N. E.
- Pope, George Samuel, Eng. m.; Illinois.....1321 East Capitol Street
- Pope, Ruth Vesta, C. C. a.; California.....1340 Meridian Place
- Popp, Frederick W., Eng. e.; New York....1710 Pennsylvania Avenue
- Porter, Charles Wallace, C. C.; Ohio.....1010 N Street
- Porter, Irwin, Eng. a.; District of Columbia.....3225 11th Street
- Porter, Robert Grove, C. C.; Virginia.....3537 Holmead Place
- Potter, Charles Hollister, C. C.; North Carolina.....918 F Street

- Pozen, Morris A., C.C.; District of Columbia.....621 P Street  
 Prender, Elizabeth, C.C.; District of Columbia...747 10th Street, S. E.  
 Price, Robert Lyons, C.C.; North Carolina.....123 B Street, S. E.  
 Prichard, Walter, C.C.; Porto Rica.....War Department  
 Primm, Herbert Wilson, C.C.; District of Columbia, 728 Lawrence Street  
 N. E.  
 Prince, Fern Herbert, T.C.; District of Columbia....742 N. J. Avenue  
 Pywell, Laura Virginia, T.C.; District of Columbia.....72 V Street  
 Rafterry, May Agnes, T.C.; District of Columbia....1412 30th Street  
 Rager, Amy Elizabeth, C.C.; District of Columbia.....812 21st Street  
 Ramsdell, Paul, Eng.e.; District of Columbia.....No. 22 The Gotham  
 Ramsey, Herbert Percy, C.C.; District of Columbia, 812 Massachu-  
 setts Avenue, N. E.  
 Raymond, Norman Ticknor, C.P.S.; New Jersey....1406 Allison Street  
 Reavis, Andrew Bryant, Eng.; Tennessee.....1502 Vermont Avenue  
 A.B., 1912, George Washington University  
 Redfield, Arthur Huber, C.C.; District of Columbia, 9 Randolph Pl.N.E.  
 Reese, Clarence Herbert, C.C.; District of Columbia....2016 9th Street  
 Reese, Clement Milton, Eng.; Maryland.....Y. M. C. A.  
 Reeve, Felicia Ann, T.C.; District of Columbia.....1626 19th Street  
 Reeve, Laura Washburn, T.C.; District of Columbia...1626 19th Street  
 Reeves, Fanny Lee, T.C.; District of Columbia.....730 22d Street  
 Reges, George, Jr., Eng.; New Jersey .....603 6th Street, S. W.  
 Reisinger, Margaret Edna, C.C.; District of Columbia..1836 4th Street  
 Renner, Wilbert Vernon, Eng.e; District of Columbia, 1605 Rhode  
 Island Avenue, N. E.  
 Richard, Charles B., Eng.; Colorado.....1860 Mintwood Place  
 Richard, Frank Thomas, Eng.m.; Colorado.....1860 Mintwood Place  
 Richards, Henry Tilton, T.C.; Massachusetts, Apt. 41, The Landmore  
 Rickard, Herbert Ephriam, C.P.S.; Tennessee.....1000 M Street  
 Riley, Cathryn Vedralia, C.C.; District of Columbia.....1754 S Street  
 A.B., 1912, Wellesley College  
 Riley, Thora M., C.C.; District of Columbia.....1754 S Street  
 Riley, Mary Olive, C.C.; District of Columbia.....1754 S Street  
 A.B., 1904, Wellesley College  
 Rini, Vitus Michael, C.P.S.; New York...1355 Maryland Avenue N. E.  
 Ritt, Joseph Fels, C.C.; District of Columbia.....1328 W Street  
 Roberts, Frederick Logan, C.P.S.; Pennsylvania.....211 Y. M. C. A.  
 Roberts, Iorwerth J., C.C.; Pennsylvania.....1310 Spring Road  
 Robinson, Ednah Florence, T.C.; District of Columbia, 2817 28th Street  
 Rochon, Louise Antoinette, C.C.; District of Columbia, 3303 13th Street  
 Rodgers, Bertha, T.C.; District of Columbia,; 1445 Massachusetts Avenue  
 Rodier, Gilbert L., Eng.; District of Columbia, 1253 Talbert Street, S. E.  
 Rohrer, Joseph R., C.C.; Ohio.....The Plymouth  
 Rollins, James Herrell, T.C.; Virginia, R. F. D. No. 2 Alexandria, Va.  
 Roper, Daniel Calhoun, Jr., C.C.; South Carolina, 816 Massachusetts  
 Avenue, N. E.



- Rose, Leonard Julian, Eng.c.; District of Columbia, 730 Shepherd Street  
 Rosen, Urban F., Eng.m.; District of Columbia... Bureau of Standards  
 Rosenberg, Samuel Lee, Eng.,c.; New Jersey, 655 16th Street, N. E.  
 Rowley, Clifford Alonzo, Eng.; South Dakota..... 1344 Kenyon Street  
 M.P.L., 1909; S.B., 1911; George Washington University; LL.B.,  
 1909; LL.M., 1912; National University  
 Ruff, Julia Elizabeth, C.C.; District of Columbia... 805 A Street, S. E.  
 Ruffner, Willis E., C.C.; Pennsylvania..... 1432 M Street  
 Russell, Paul G., C.C.; District of Columbia..... 3538 Warder Street  
 Ryan, Thomas Henry, C.C.; Colorado..... 1400 Chapin Street  
 Salant, (Mrs.) Annie, C.C.; District of Columbia... 1647 Lamont Street  
 Sale, Prentiss D., Jr., Eng.c.; District of Columbia, 225 8th Street N. E.  
 Sanders, Elsie, T.C.; District of Columbia..... 1515 Park Road  
 Saunders, Marie K., Eng.; Oklahoma..... The Brunswick  
 LL.B., 1909; Washington College of Law; M.P.L., 1910; George  
 Washington University  
 Schenck, Mrs. Stella R., C.C.; Indiana..... 514 Kenyon Street  
 Schladt, George J., Eng.e.; District of Columbia, Potomac Heights, D. C.  
 Schlosser, Julius L., C.C.; District of Columbia..... 611 Lamont Street  
 Schmidt, Alfred Gable, Eng.a.; Pennsylvania..... 1936 First Street  
 Schmidt, Meta, C.C.; District of Columbia..... 1912 G Street  
 Schmitt, Waldo Lasalle, C.C.; District of Columbia, 211 Florida Avenue  
 Schoenfeld, Rudolph, C.C., District of Columbia, 3448 34th Place, Cleve-  
 land Park, D. C.  
 Schragenheim, Betty, C.C.; District of Columbia... 1836 Lamont Street  
 Schul, Louise Amy, C.C.; District of Columbia, 235 New Jersey Avenue  
 Scott, Howard, C.C.; District of Columbia..... 1331 3d Street  
 Scott, Leila Fordham, C.C.; District of Columbia, 649 B Street, N. E.  
 Seaman, Alexander Rives, C.C.; Virginia..... Alexandria, Va.  
 Searle, Juliet, MacCall, T.C.; District of Columbia... 1131 12th Street  
 Seiler, Alfred Grove, C.C.; District of Columbia, American University  
 Park  
 Seltzer, Harry Gabriel, T.C.; Pennsylvania..... 907 23d Street  
 Sharpless, Frank E., Eng.; District of Columbia, 234 11th Street, S. E.  
 Sheffield, Edgar, C.C.; District of Columbia..... 1017 12th Street  
 Short, Helen M., C.C.; District of Columbia..... 1511 Park Road  
 Shuman, Royal L., C.C.; Pennsylvania..... 3519 14th Street  
 Silber, Walter Charles, Eng.; Pennsylvania..... 239 9th Street, N. E.  
 Silvester, Jane B., C.C.; District of Columbia.... 2005 Kalorama Road  
 Simmons, Lybrook, Eng.; Virginia..... East Falls Church, Va.  
 Simpson, Walter Scott, Eng.m.; District of Columbia, 508 10th Street,  
 S. E.  
 Skinner, Arthur William, Eng.m.; Maryland..... Takoma Park, Md.  
 Slarrow, Malcolm Gordon, Eng.c.; District of Columbia, 1308 13th Street  
 Slindee, Michael E., C.C.; Iowa..... Y. M. C. A.  
 Sloane, Charles E., Eng.; District of Columbia..... 1733 T Street  
 Small, Thomas Lemuel, C.C.; District of Columbia, 426 15th Street, S. E.



- Smith, Addison Wells, Eng.a.; District of Columbia, 1866 California Street
- Smith, Baillie Fiesco, Eng.a.; District of Columbia.....1747 P Street
- Smith, Duncan Campbell, C.C.; Maryland.....Rockville, Md.
- Smith, Harold C., C.C.; Maryland.....Rockville, Md.
- Smith, Janie Alice, C.C.; District of Columbia, 637 Massachusetts Avenue, N. E.
- Smith, Jessie MacLure, C.C.; Pennsylvania.....315 H Street
- Smith, McClain Barwitz, Eng.e.; Pennsylvania, 658 Morris Street, N. E.
- Smith, Raymond Chester, Eng.; Virginia.....Ballston, Va.
- Snelling, Henry Hornor, Eng.m.; Virginia.....3522 10th Street
- Soling, Abraham, Eng.; New York.....808 H Street
- Soto, Santos, (h) Eng.; Honduras.....2006 F Street
- Soubliene, Wilbert C. Dela, Eng.c; Canada.....2025 G Street
- Southgate, Letitia Park, C.C.; District of Columbia, 1439 Fairmont Street
- Spencer, Nellie Scribner, C.C.; District of Columbia...3810 5th Street
- A.B., 1901 Hiram College; A.M., 1906, George Washington University
- Spiker, Clarence Jerome, C.P.S.; District of Columbia, 1641 13th Street
- Springer, Lew Wallace, C.P.S.; New Mexico.....The Benedict
- Stambaugh, Henry Joseph, Eng.; District of Columbia, 3833 14th Street
- Stambaugh, Josephine, C.C.; Virginia.....Falls Church, Va.
- Stannard, Winfield S., C.C.; Massachusetts.....Bureau of Standards
- Starr, Relda A., C.C.; District of Columbia.....120 Randolph Place
- StClair, Albert Thurston, Eng.e.; District of Columbia...1319 T Street
- Steck, Charles Frederick, Jr., C.C.; District of Columbia 1620 Riggs Place
- Stein, Percy, C.C.; District of Columbia.....1524 7th Street
- Steinberg, Aaron, C.C.; New York.....828 12th Street
- Steinberg, Abraham, C.C.; New York.....1213 H Street
- Stevens, Edwin Holt, C.C.; Maryland, 823 N. Fulton Ave., Baltimore, Md.
- Stewart, Elizabeth Tabb, T.C.; Virginia.....East Falls Church, Va.
- Stockard, Marietta, T.C.; North Carolina.....1627 Lamont Street
- Stockton, Thomas Jefferson, Eng.e.; Kansas.....1944 Second Street
- Stoeve, Frank Wallace, Eng.; District of Columbia....1706 You Street
- Stoll, Clara, C.C.; District of Columbia...1302 Rhode Island Avenue
- Stutler, H. Ward, Eng.a.; West Virginia.....Y. M. C. A.
- Stutzman, William Ernest, Eng.e.; District of Columbia, 3533 Warder Street
- Sullivan, Howard Cheseldene, Eng.; Maryland, Box 321, Mt. Rainier, Md.
- Summy, Ethel, T.C.; District of Columbia.....1623 R Street
- Sutton, Raymond E., Eng.; Utah.....1466 Rhode Island Avenue
- Swann, Theodore Magruder, C.C.; Virginia.....Clarendon, Va.
- Swartzell, Henry Rodley, C.C.; District of Columbia, 2117 Bancroft Pl.
- Taggart, Earl, C.C.; Iowa.....Y. M. C. A. Building
- Talcott, John J., Eng.; District of Columbia.....509 9th Street, S. E.

- Tallman, Henry William, C.C.; Michigan.....150 Seaton Place, N. W.  
 Tauberschmidt, John A., C.C.; District of Columbia, 922 Westminster  
 Street
- Taylor, James Norman, C.C.; Delaware.....1315 K Street
- Taylor, Marion Antoinette, C.C.; District of Columbia, 1007 Otis Place
- Taylor, Nellie Boyd, T.C.; District of Columbia.. 1753 Columbia Road
- Taylor, Olivia Alexander, C.C.; Virginia.....519 21st Street
- Teal, Leon D. H., Eng.c.; New Jersey.....216 Maryland Avenue
- Temple, Grace Lincoln, C.C.; District of Columbia.....The Farragut
- Tepper, Benjamin Lione, C.P.S.; New Jersey,.....1244 Evarts Street
- Terry, Leo Claude, C.C.; District of Columbia....1019 Lamont Street
- Terwisse, Anthony T., Eng.e.; Holland.....718 7th Street, N. E.
- Thatcher, Arthur S., C.C.; Pennsylvania.....The Nancemond
- Thomas, Calvin Carroll, C.C.; Delaware.....2101 F Street
- Thomas, Lisle, C.C.; Michigan.....901 M Street
- Thompson, Harry Woodward, C.C.; Iowa.....1340 Girard Street
- Thorne, Harold C., Eng.e.; Maryland.....Bureau of Standards
- Thornton, Smith Gordon, C.C.; Louisiana.....Senate Office Building
- Tibbitts, Russell D., C.C.; District of Columbia.....3341 18th Street
- Tietig, Chester, C.C.; Ohio.....1214 12th Street
- Tiffany, Emma Ruth, T.C.; District of Columbia... 3409 Brown Street
- Tilton, Fletcher Sanford, C.C.; District of Columbia, 2947 Tilden Street
- Timm, Minnie Emilie, C.C.; Washington.....311 C Street
- Tomlin, Josephine M., C.C.; District of Columbia, 1011 B Street, N. E.
- Townsend, Robert Swan, C.C.; District of Columbia, 1447 Irving Street
- Townsend, Tyler H., Eng.c.; Texas.....1611 Lincoln Avenue, N. E.
- Trowbridge, Agnes Cowgill, C.C.; District of Columbia..1821 H Street
- Trumbower, Eli C., C.C.; Delaware.....1736 G Street
- Truscott, Harry Alvin, C.P.S.; Kansas, Interstate Commerce Com-  
 mission
- Tyndall, Mary Siphord, T.C.; District of Columbia.....1008 I Street
- Ulrickson, Hilda Louise, C.C.; District of Columbia, 617 21st Street
- Underwood, Harriet, T.C.; District of Columbia.....2551 37th Street
- Underwood, Mary Louise, T. C.; District of Columbia, 707 East Cap-  
 itol Street
- Upton, William Bayly, Jr., Eng.; District of Columbia, 3420 Newark  
 Street, Cleveland Park
- Urner, Ralph Marion, C.C.; District of Columbia, 40 C Street, N. E.
- Valaer, Peter, Jr., C.C.; District of Columbia, Bureau Internal Revenue;  
 S.B., 1906, College of Agriculture and Mechanic Arts., North  
 Carolina
- Van Kirk, Lloyd Howard, C.C.; Pennsylvania, 1845 Ingleside Terrace
- Van Loock, Albert M., Eng.; District of Columbia, 104 15th Street, N.E.
- Van Loock, Louis Anthony, Eng.; District of Columbia, 104 15th St. N. E.
- Varney, Forrest F., Eng.c.; Wisconsin.....209 Y. M. C. A.
- Veazie, Henry Purcell, C.C.; District of Columbia, 1313 Harvard Street
- Vilkomirson, Herman W., Eng.; New York.....923 M Street

- von Zielinski, Carl Maria Johann, C.P.S.; Germany....1706 F Street  
 Vose, J. Raymond, C.C.; Kentucky.....2018 F Street  
 Wakefield, Walter Harold, Eng.c.; District of Columbia, 129 Maple Ave.  
 Takoma Park, D. C.
- Walker, Alberta, T. C.; District of Columbia.....1634 S Street  
 Walker, Janet Gibson, C.C.; District of Columbia, 420 B Street, N. E.  
 Wall, Adelaide Dorothy, C.C.; District of Columbia, 4009 14th Street  
 Walter, Joseph Charles, C.C.; District of Columbia, 320 3d Street, N. E.  
 Walters, Marion Irvén, Eng.c.; District of Columbia, 3228 Warder Street  
 Walton, Melville R., C.C.; District of Columbia, 816 Eye Street, N. E.  
 Wanlass, William L., C.P.S.; Utah.....2120 H Street  
 Ward, Albert, C.C.; District of Columbia, 2811 12th Street, N. E.  
 Ward, Ralph Porter, Eng.e.; District of Columbia, 1016 25th Street  
 Waring, Grace Anna, C.C.; District of Columbia....1423 Newton Street  
 Warner, Harold Ellsworth, C.C.; District of Columbia, 1020 9th Street  
 Watsky, Jack, C.C.; Virginia .....The Cumberland  
 Webb, James William, Eng.; District of Columbia, 1314 E. Capitol Street  
 Weber, Elizabeth, T.C.; Maryland.....Berwyn Heights, Md.  
 Weber, John Augustus, Eng.; Pennsylvania.....518 6th Street, N. E.  
 Webster, Benjamin, Eng.; Connecticut.....604 22d Street  
 A.B.; 1907, Yale University
- Weeks, Albert E., Eng.; District of Columbia....332 Eye Street, S. W.  
 Weinstein, Reuben, C.C.; New York.....1914 Pennsylvania Avenue  
 Wharton, Roger Daniel, Eng.c.; District of Columbia, 3411 Oakwood  
 Terrace
- Whitaker, Norman T., C.P.S.; Pennsylvania.....1105 K Street  
 White, Mary Josephine, T.C.; Ohio, National Park Seminary, Forest  
 Glen, Maryland
- Whitford, Bessie, T.C.; District of Columbia.....3369 18th Street  
 Wilbur, Elizabeth Sabrina, C.C.; District of Columbia, 2107 S Street  
 Wilburn, Escol Simpson, C.C.; Virginia.....922 New York Avenue  
 Wilhelm, Robert Mason, C.C.; Maryland.....1845 Calvert Street  
 Wilkins, Laurence Ordway, C.P.S.; District of Columbia, The Con-  
 gressional Apartment
- Williams, Robert Daniel, C.C.; Maryland, 2021 Lanvale Street, Bal-  
 timore, Maryland; A.B.; A.M., Princeton University
- Wilson, Joseph H., Eng.m.; Pennsylvania.....1733 17th Street  
 Wilson, Margaret Posey, C.C.; District of Columbia, 219 First Street, N.E.  
 Wingate, Charles Ludwell, C.P.S.; District of Columbia, 2423 18th Street  
 Winn, Talmadge Swoll, C.C.; Georgia.....2016 G Street  
 A.B., 1907, University of Georgia
- Wong, Ung Ce, C.C.; China .....1418 L Street  
 Wood, Thurston Elmer, C.C.; New Jersey.....2143 Y Street  
 Woods, Frederick Davis, Eng.; Arkansas.....402 M Street  
 Woodward, Francis Albert, Eng.m.; District of Columbia, 2248 Ontario  
 Road
- Worley, Nathaniel T., C.C.; District of Columbia.....1040 W Street



Worley, Sarah Antoinette, C.C.; District of Columbia, 1440 W Street	
Worrell, Everill, C.C.; District of Columbia.....	1105 Clifton Street
Worster, Louise, T.C.; District of Columbia.....	942 B Street, S. W.
Wright, Marguerite Cecilia, C.C.; District of Columbia...	1103 P Street
Wu, Su-Ying Chiao, C.C.; China.....	2415 20th Street
Wu Ying, C.C.; China.....	2415 20th Street
Yoder, Bertha Alice, T.C.; District of Columbia, 144 11th Street, S. E.	
Yoder, Bessie Lee, T.C.; District of Columbia, 144 11th Street, S. E.	
Yost, Elsie May, C.C.; District of Columbia, 1002 Pennsylvania Avenue, S. E.	
Yost, William Edward, Eng.e.; District of Columbia, 1002 Pennsylvania Avenue, S. E.	
Young, Irene Ottillie, C.C.; Virginia.....	712 10th Street
Zapf, Lewis Roy, C.P.S.; Tennessee.....	836 Rittenhouse Street
A.B., 1906, De Pauw University	
Zinssmeister, Grace Mary, T.C.; District of Columbia	
	1364 Girard Street
Zundell, Frank F. C.C.; Pennsylvania.....	War Department

## SUMMARY

## Graduate Students

Students in attendance.....	11	
Candidates for D.C.L. degree.....	1	
Candidates for C.E. degree.....	5	
Candidates for E.E. degree.....	3	
Candidates for S.M. degree.....	21	
Candidates for A.M. degree.....	27	
Candidates for Ph.D. degree.....	24	
Auditors.....	2	
	94	
Duplicates.....	2	92

## Undergraduate Students

*Columbian College*

Candidates for A.B. degree.....	184
Candidates for S.B. degree.....	2
Candidates for B.S. in Chemistry degree.....	44
Special.....	120
Auditors.....	3
	353



*College of Engineering and Mechanic Arts*

Candidates for B.S. in Arch. degree.....	15
Candidates for B.S. in C.E. degree.....	51
Candidates for B.S. in E.E. degree.....	26
Candidates for B.S. in M.E. degree.....	24
Special.....	80
	<hr/>
	196

*College of Political Sciences*

Candidates for A.B. degree.....	27
Candidates for M.Dip. degree.....	2
Special.....	27
	<hr/>
	56

*Teachers College*

Candidates for A.B. and Teachers' Diploma.....	78
Candidates for Teacher's Diploma.....	1
Special.....	8
	<hr/>
	87
	692
	<hr/>
	784
Duplicates.....	6
	<hr/>
	778

## PROFESSIONAL DEPARTMENTS

## DEPARTMENT OF LAW

## First Year

Addison, John West; Virginia.....	Bureau of Corporations
A.B., 1905; A.M., 1906, Washington and Lee University	
Allanson, Henry E.; Iowa.....	Y. M. C. A.
The George Washington University	
Altman, Stanley B.; South Carolina.....	813 12th Street
University of South Carolina	
Anderson, Samuel Victor; Mississippi.....	345 House Office Building
Austin, Charles Morrison; Tennessee.....	Florence Court
Graduate, 1905, United States Naval Academy; University of Tennessee	
Bardwell, Halsey Warren; Vermont.....	2821 14th Street
Ph.B., 1910, Ewing College	
Bartholomew, Don C.; Ohio .....	1704 F Street
The George Washington University	

- Bowman, Ralph Grantham; Indiana.....Speedway Inn  
Depauw University
- Branch, Hilarion Noel; Mexico.....Mexican Embassy
- Bratton, Leslie Emmett; Nebraska.....Navy Department  
Graduate, 1907, United States Naval Academy
- Brown, Lee Hoxie; District of Columbia.....2464 Ontario Road  
The George Washington University
- Bushnell, Paul; District of Columbia.....1757 Church Street  
The George Washington University
- Butterwick, Leonard L.; North Dakota.....222 North Capitol Street
- Church, Kortright; District of Columbia.....1608 20th Street  
A.B., 1912, Yale University
- Clark, Marion; Maryland.....1321 N Street  
A.B., 1901; A.M., 1904; Western Maryland University
- Claytor, Spry Owen; Ohio.....1504 Columbia Road
- Cornell, Herbert Watson; Colorado.....Civil Service Commission  
A.B., 1908, University of Colorado
- Crews, Chalsia E.; Missouri.....1913 North Capitol Street
- Davis, Ray Osborn; Virginia....507 Prince Street, Alexandria, Virginia
- Diuguid, Garnett Bertrand; Virginia.....2026 G Street  
University of Virginia
- Donaldson, William Raymond; New York .....1632 6th Street
- Doughty, James Lloyd; Texas.....1404 L Street  
University of Texas
- Fickas, Melville, Philip; Arizona.....1311 13th Street  
The George Washington University
- Finckel, William Henry, Jr.; District of Columbia.....1625 S Street  
The George Washington University
- Frederick, Alfred Hardin; Texas.....1345 Vermont Avenue
- Garner, Alan Freeman; Virginia.....1400 Chapin Street
- Griggs, Elmer Vernon; Iowa.....1814 G Street  
B.S. in EE., 1908; B.M.E., 1909, Iowa State College
- Grover, Charles S.; Indiana.....3616 Newark Street, Cleveland Park  
B.S. in E.E., 1910, Purdue University
- Groves, George Summer; Virginia.....R. F. D. No. 2, Alexandria, Va.  
Virginia Polytechnic Institute
- Hamilton, Alexander Scott, Jr.; Virginia.....1102 L Street
- Hatch, Robert Harrison; Massachusetts.....1400 Chapin Street  
A.B., 1911, Dartmouth College
- Haugen, Lauritz G.; Iowa.....Winston Hotel  
University of Minnesota
- Haycraft, Everett Fairfield; Texas.....36 Todd Place, N. E.
- Healy, Joseph Edward; Virginia.....1903 N Street  
William and Mary College
- Henry, Ralph Dangerfield; Maryland.....738 15th Street  
The George Washington University

Henry, Tyler; Texas.....	1825 19th Street Austin College
Hill, George Sydney; Massachusetts.....	1432 M Street The George Washington University
Hillyer, Douglas; District of Columbia.....	2021 Hillyer Place
Hoffman, Henry B.; District of Columbia.....	1120 7th Street, N. E.
Hulsizer, Robert Inslee; Massachusetts.....	1903 N Street Massachusetts Institute of Technology
James, Joseph Pierson; California.....	1504 R Street Leland Stanford University
Jenks, Clayton Louis; New York, 3020 Macomb Street, Cleveland Park. A.B., 1906, S.M., 1909 Hamilton College	
Jensen, Julius Christian; Iowa.....	1343 L Street State University of Iowa
Johnson, Ross Holbrook; District of Columbia.....	1804 Belmont Road The George Washington University
Jones, Shirley Penrose; Utah .....	31 B Street
Keats, Harold; District of Columbia.....	1304 Fairmont Street A.B., 1912, The George Washington University
Kelly, William F., Jr.; District of Columbia.....	2117 Flagler Place The George Washington University
Kirster, Frank J.; Michigan.....	1219 K Street University of Michigan
Knight, Oliver Drake; Wisconsin.....	1709 17th Street University of Wisconsin
Kuntz, Herbert Oscar; Pennsylvania .....	2715 13th Street
LeFebvre, Clarence Charles; Wisconsin.....	Bureau of Chemistry A.B., 1907, University of Wisconsin
Lindsay, Alfred Briscoe; District of Columbia.....	2550 14th Street The George Washington University
Lynn, Rodney Lake; Virginia.....	1100 Vermont Avenue
Lyon, John; Virginia.....	504 Southern Building University of Virginia
McFall, John Monteith; South Carolina.....	1012 11th Street A.B., 1904, College of Charleston; A.M., 1906, Columbia Uni- versity
Mankowski, John S.; New Jersey.....	2006 F Street
Manning, Ellis Wooster; Oklahoma.....	1012 I Street
Maréchal, Greer McInnis, Alabama.....	1307 R Street A.B., 1908, University of Alabama
Mehl, Charles Herman; Michigan.....	1830 G Street
Merritt, Robert. G.; New York.....	Forest Service B.F., 1912, Biltmore Forest School; United States Naval Academy
Milmore, Oscar Longfellow; New York.....	1713 Corcoran Street A.M., 1912, Columbia University
Miltenberger, William Fernand; District of Columbia.....	1738 M Street Georgetown College, University of Paris

- Mozingo, Harley I.; Colorado.....1830 G Street  
 Mulligan, William Miles; District of Columbia.....3105 11th Street  
 The George Washington University  
 Negley, Noel A.; Nebraska.....Y. M. C. A.  
 A.B., 1912, University of Nebraska  
 O'Harra, Stanford Leland; Ohio.....909 C Street, N. E.  
 Osborn, Clarence C.; South Dakota.....510 C Street, N. E.  
 Paine, John Gregg; Pennsylvania.....3746 McKinley Street  
 A.B., 1909, Wesleyan University  
 Parmelee, Earl Linsley; Pennsylvania.....3308 14th Street  
 Peynado, Francisco J.; Dominican Republic.....1532 22d Street  
 Normal School of Santo Domingo. Professional Institute of  
 Santo Domingo  
 Pierce, Herbert Robbe; Vermont.....Senate Post Office  
 S.B., 1910, University of Vermont  
 Pierce, James Francis; Michigan.....Patent Office  
 B.C.E., 1912, University of Michigan  
 Potter, Charles Hollister; North Carolina.....918 F Street  
 The George Washington University  
 Pratt, Philip Rogers; District of Columbia.....2015 Columbia Road  
 University of Virginia  
 Primm, Paul Hastings; District of Columbia, 720 Lawrence Street, N. E.  
 Reavis, Newton C.; Tennessee.....1903 N Street  
 Vanderbilt University  
 Reese, Francis Sydney; Maryland.....1736 G Street  
 The George Washington University  
 Reinhardt, John Joy; Nebraska.....1717 S Street  
 The George Washington University  
 Rini, Vitus Michael; New York.....1355 Maryland Avenue, N. E.  
 Rogers, George C.; New York.....1755 Lamont Street  
 Rogers, James Cunningham; District of Columbia....3546 13th Street  
 University of Pittsburg  
 Roper, Daniel Calhoun, Jr.; South Carolina, 816 Massachusetts Ave. N.E.  
 Sanborn, George Allen; Wisconsin.....925 Rhode Island Avenue  
 A.B., 1912, The George Washington University  
 Schenck, Arthur C.; District of Columbia.....514 Kenyon Street  
 Schmied, James William; Ohio.....1117 Euclid Street  
 S.B., 1910, Ohio Northern University  
 Shaw, Randolph Codman; District of Columbia.....The Hawarden  
 Washington and Lee University  
 Shepard, William Wallace; California....129 Maryland Avenue, N. E.  
 Smith, Breedlove; Texas.....2106 R Street  
 A.B., 1912, Austin College  
 Smith, Henry Charles Albert; Ohio.....1008 I Street  
 Heidelberg University, Tiffin, Ohio  
 Smith, Howard Burton; Nebraska.....216 4th Street, S. E.  
 Smith, Robert William; District of Columbia.....1418 Allison Street



- Spare, Romeyn Andrew; Massachusetts.....Patent Office  
A.B., 1908, Harvard University
- Sprague, Clarence Andrew; District of Columbia, 1940 2d Street N. E.  
S.B., 1904, Syracuse University
- Springs, Laertes Pittman; District of Columbia....1945 Calvert Street
- Stackhouse, George Milton; South Carolina.....Hotel Gordon  
S.B., 1894, Citadel Military College. LL.B., 1898, Georgetown  
University.
- Stanley, Elton Wood; South Dakota.....1730 M Street  
University of Wisconsin
- Stevens, Arthur E.; Missouri.....2028 G Street
- Stewart, Elmer; District of Columbia.....1812 Lamont Street  
B.S., in Chemistry, 1912, The George Washington University
- Stoddard, Alfred L.; Iowa.....1709 17th Street  
University of Wisconsin
- Stone, Jesse Raymond; Wisconsin.....1821 Corcoran Street  
B.Litt., 1899, University of Wisconsin
- Thompson, Alfred Wright; District of Columbia..1304 Fairmont Street  
The George Washington University
- Thurman, Samuel D.; Utah.....Interstate Commerce Commission  
University of Utah
- Trudgian, Andrew Beers; West Virginia.....603 Columbia Road  
University of Pennsylvania
- Vaughn, Orville R.; Tennessee.....1008 I Street
- Wadsworth, John Thaddeus; Maine.....1505 Vermont Avenue  
A.B., 1909, Bates College
- Whitehorn, Homer A.; Nebraska.....1814 Park Road  
A.B., 1908, Nebraska Wesleyan University
- Wilson, Laurance Norton; Idaho.....1502 Vermont Avenue  
The George Washington University
- Winn, Talmadge S.; District of Columbia.....2016 G Street  
A.B., 1907, University of Georgia
- Witter, Lawrie L.; New York.....Patent Office
- Woolley, Herbert Elliott; Utah.....Forest Service
- Wright, Charles William; Virginia.....429 Senate Office Building  
University of Virginia
- Wright, Clarence Edward; Utah.....215 New Jersey Avenue  
Agricultural College of Utah
- Yost, William Edward; District of Columbia, 1002 Pennsylvania Avenue  
The George Washington University

## Second Year

- Acker, Harold Knowles; District of Columbia.....913 16th Street  
Lafayette College
- Anderson, Paul; Illinois.....The Portsmouth
- Barr, John Lester; District of Columbia.....The Wyoming  
A.B., 1910, Harvard University

- Barton, Walter Elbert; Idaho.....1502 Vermont Avenue  
University of Colorado
- Baumgartner, Edgar Foster; New Jersey.....The Champlain  
M.E., 1911, Lehigh University
- Bisson, Louis Alfred; Massachusetts.....3011 Georgia Avenue  
Worcester Polytechnic Institute
- Black, Henry George Atkinson; Massachusetts, 636 Rock Creek Church  
Road. Massachusetts Institute of Technology
- Borland, Paul Raymond; Pennsylvania.....1903 N Street  
A.B., 1910, Washington and Jefferson College
- Chamberlin, Arthur Newell; Vermont.....1903 N Street
- Clark, Bennett Champ; Missouri.....1509 16th Street  
University of Missouri
- Clark, Merrell Edward; New York.....1860 Columbia Road  
M.E., 1911, Cornell University
- Cox, John Dee; Texas.....4300 Kansas Avenue  
Southwestern University
- Crane, Alpheus Jennings; District of Columbia, 2930 Thayer Street, N. E.  
B.S., in E.E., 1903, Purdue University
- Cumpston, Edward Henry, Jr.; Virginia.....1613 30th Street  
M. E., 1909, Cornell University
- Elkins, Harry Scott; South Dakota.....1502 Vermont Avenue
- Enlows, Harold Franklin; Illinois.....1017 12th Street
- Evans, Budd; Minnesota.....1021 Kenyon Street
- Fauntleroy, John Smith Young; Louisiana.....Senate Office Building  
A.B., 1905, Louisiana State University.
- Fitch, William Reed; North Dakota.....413 Y. M. C. A.  
The George Washington University.
- Fletcher, Frederick Dix; Washington.....Y. M. C. A.  
University of Kansas.
- Fraizer, Cecil C.; Indiana.....1412 Euclid Street  
University of Pennsylvania.
- French, Louis Osborne; Wisconsin.....1903 N Street  
S.B., 1910, Massachusetts Institute of Technology.
- Freyer, Frank Barrows; District of Columbia.....Navy Department  
Graduate, United States Naval Academy; Georgia School of  
Technology.
- Galloway, Andrew Barritt; Oklahoma.....1100 Vermont Avenue
- Greenberg, Louis; District of Columbia.....612 N Street  
The George Washington University.
- Greene, James Woodall; Maryland.....1517 P Street
- Hall, Bartow Harwood; Colorado.....U. S. Senate Office Building  
A.B., 1910, Amherst College.
- Handy, William Upshur; District of Columbia.....23 8th Street S. E.
- Howard, Frank Atherton; Illinois.....1733 R Street  
B.S., in M.E., 1911, The George Washington University.
- Ingraham, James Allen; Oklahoma.....1303 R Street

- Isom, James Rudolph; Arkansas.....1100 Vermont Avenue  
University of Arkansas.
- Johnson, Arthur Chilion; Colorado.....901 20th Street  
University of Colorado.
- Jones, Carl Curtis; Maine.....348 Senate Office Building
- LaFollette, William LeRoy, Jr.; Washington....1865 California Street  
State College of Washington.
- Landers, Maurice Birdsall; New York.....1489 Newton Street  
A.B., 1903, Hamilton College; S.B., 1905, Massachusetts Insti-  
tute of Technology.
- Laylin, Lewis F.; Ohio.....The Portland  
A.B., 1912, Ohio State University.
- McCawley, Harrison Byington; Iowa.....1432 M Street  
A.B., 1910, Drake University.
- Maddox, Coburn Fletcher; Montana.....Florence Court
- Meckley, Robert Byers; Pennsylvania.....1400 Chapin Street  
B.S. in E.E., 1908, Pennsylvania State College.
- Morse, Robert Virgil; New York.....1768 Columbia Road  
M. E., 1911, Cornell University.
- Neibling, Harold Edmund; Nebraska.....2129 F Street  
A.B., 1912, Cotner University.
- Nellis, William Lyons; Ohio.....Y. M. C. A.  
Ohio Wesleyan University.
- Oldsen, Carl H.; Iowa.....717 10th Street
- Read, Raymond Edgar; Massachusetts.....203 The Dunsmire
- Rice, Willis Ballance; New York.....1647 Lamont Street  
M.E., 1907, Cornell University.
- Rubenstein, Samuel; New York.....1230 11th Street
- Sanders, Harold Benthall; Mississippi.....332 E Street N. E.  
S.B., 1910, Mississippi Agricultural and Mechanical College.
- Savage, Henry J.; Michigan.....1227 Girard Street N E.  
B.S. in E.E., 1908, University of Michigan.
- Schaeffer, Harrold Christian; District of Columbia.....1843 R Street
- Schantz, Leroy Christian; Iowa.....Y. M. C. A.  
B.S. in E.E., 1908, Iowa State College.
- Scheffer, Joseph Walter; Connecticut.....1717 S Street
- Simpson, Archer Roberts; Connecticut.....1903 N Street  
A.B., 1911, Yale University.
- Spahr, Neal Bradford; Tennessee.....921 I Street  
A.B., 1911, University of Chattanooga.
- Stafford, Edward; District of Columbia.....1725 Lamont Street  
A.B., 1911, Dartmouth College.
- Stevenson, Charles Stanley; Kansas.....921 O Street  
Washburn College.
- Stone, James Austin; District of Columbia..1618 Rhode Island Avenue  
A.B., 1910 Swarthmore College.

- Symons, Thomas William, Jr.; District of Columbia,  
1606 New Hampshire Avenue  
A.B., 1911, Yale University.
- Tanner, Marion Snow; Utah.....1502 Vermont Avenue  
A.B., 1911, University of Utah.
- Van Wagoner, John D.; Utah.....Y. M. C. A.  
Utah Agricultural College.
- Weikert, Edward Wilford; Pennsylvania.....Patent Office  
Ph.B., 1906, Brown University.
- White, Joseph Curtis; Maine.....320 Maryland Avenue N. E.  
A.B., 1911, Bowdoin College.
- Wolfe, Edmund Stanley; Maryland.....District National Bank  
The George Washington University.
- Woodson, Walter Browne; Virginia.....Navy Department  
Graduate, 1905, Postgraduate, 1907, United States Naval  
Academy.
- Wright, Ulysses Wayne; Illinois.....1307 R Street  
A.B., 1911, Illinois College
- Young, Earl; Minnesota.....1213 H Street

## \*Third Year

- Alexander, William Morrison; District of Columbia.....1711 Q Street  
Williams College.
- Barlow, Frank Augustus; Minnesota.....1717 S Street  
A.B., 1910, University of Minnesota.
- Bickel, Harvey Cleveland; Pennsylvania.....Y. M. C. A.
- Bond, Eugene Webster; Illinois.....902 F Street  
The George Washington University.
- Bower, Frank Albert; New York.....2627 Adams Mill Road  
M.E., 1910, Cornell University.
- Brookes, John St. Clair, Jr.; District of Columbia,  
1525 Corcoran Street  
A.B., 1907; A.M., 1910, The George Washington University.
- Buck, George Burton; Maryland,  
Economy and Efficiency Commission, White House
- Cobb, Victor; Virginia.....Patent Office  
S.B., 1908, Harvard University.
- Cordon, Alfred C.; Idaho.....No. 7, Ventosa Apartments  
University of Utah.
- Coumbe, Edward Celestine; Washington.....1502 Vermont Avenue  
Colorado State Agricultural College.
- Creekmore, Thomas Leonidas; Virginia.....1502 Vermont Avenue  
William and Mary College.
- Daniel, Robert Todd; District of Columbia.....3000 Q Street

\* Includes fourth year candidates for LL.B.



- Davis, Max Warburton; Connecticut.....2518 17th Street  
M.E., 1908, Cornell University.
- Davis, Myron Mathews; Maine.....Patent Office  
S.B., 1909, Massachusetts Institute of Technology.
- Deibert, Arthur Hannum; District of Columbia...1411 Harvard Street
- Denning, William Ira; Georgia.....4127 9th Street  
The George Washington University.
- Des Jardins, Clarence Bigelow; Michigan.....1402 L Street  
A.B., 1909, Kalamazoo College.
- DeWolf, Richard Crosby; Massachusetts.....Library of Congress  
Massachusetts Institute of Technology.
- Diener, John Astor; Indiana.....1903 N Street  
B.S. in E.E., 1910, Purdue University.
- Dunham, Harry E.; New York.....1664 Columbia Road  
E.E., 1906, Syracuse University.
- Dutton, Clarence Benjamin; Massachusetts.....1331 Belmont Street  
B.L., 1911, The George Washington University.
- Eickhoff, Theodore Henry; Indiana.....1511 16th Street  
B.S. in E.E., 1908, Purdue University.
- Fehr, J. Ralph; Illinois.....Patent Office  
The George Washington University.
- Feldman, Peter Royal; Wisconsin.....Navy Department  
The George Washington University.
- Finley, David Edward, Jr.; South Carolina...1219 Connecticut Avenue  
A.B., 1910, University of South Carolina.
- Gerard, Charles Wesley; District of Columbia.....2212 Flagler Place  
A.B., 1906, Ohio State University.
- Gibbon, Charles Hugh; Wisconsin.....21 The Arkwright  
University of Wisconsin.
- Guptill, Leon Clifton; Maine.....21 1st Street N .E.  
A.B., 1909, Colby College; B.L., 1912, The George Washington  
University.
- Harding, Harvey Almon; Nebraska.....1739 Park Road  
Northwestern University.
- Hawley, Charles Taft; Massachusetts.....Patent Office  
S.B., 1898; M.E., 1908, Worcester Polytechnic Institute.
- Hawley, Luther W.; Vermont.....Patent Office  
S.B., 1908, Worcester Polytechnic Institute.
- Henderson, Robert; District of Columbia.....1601 23d Street  
Graduate, 1902, United States Naval Academy.
- Hinton, Sebastian; District of Columbia.....818 17th Street  
A.B., 1909, Princeton University.
- Hubbard, Elliott S.; New York.....Government Printing Office
- Hunter, William Boyd; Nebraska.....Bureau of Corporations  
S.B., 1897; A.M., 1898, University of Nebraska.
- Jackson, Edwin Roy; Iowa.....2106 F Street  
S.B., 1904, State University of Iowa.

- Jeffrey, Frank Rumer; Washington.....1502 Vermont Avenue  
The George Washington University.
- Kause, Arthur John; District of Columbia...1905 Jackson Street N. E.
- Kennedy, George Henry, Jr.; District of Columbia,  
1224 Massachusetts Avenue  
B.S., in M.E., University of Pennsylvania.
- Klein, Raphael S.; Colorado.....The Plymouth
- Knowlton, Morris Willson; Maine. 302 Eastern Avenue, Takoma Park
- Krogstad, Robert Bacon; District of Columbia.....1524 K Street  
Cornell University.
- Kunkel, Frederick Eugene; Pennsylvania.....1717 S Street
- Larson, William Ludwig; South Dakota.....1903 N Street
- Larazus, I. Burt; Massachusetts.....2026 F Street
- Lillie, Ray Dudley; Michigan.....1329 New York Avenue  
A.B., 1904, University of Michigan.
- Mapes, Carl Anthony; Michigan.....419 District Building
- Miller, Lawrence A. Gale; Massachusetts.....Patent Office  
A.B., 1908, Harvard University.
- Moore, James Ballard; District of Columbia.....1869 Columbia Road
- Moore, Maurice Malcolm; Michigan.....1869 Columbia Road  
The George Washington University.
- Moore, Rawles; Kentucky.....1903 N Street
- Morrison, William Lester; Massachusetts.....The Dudley  
The George Washington University.
- Munden, Ralph; Pennsylvania.....Patent Office  
M.E., 1906, Cornell University.
- Neuhauser, Roy Lyman; District of Columbia.....1707 21st Street  
A.B., 1909, The George Washington University.
- Oberlin, John Jay; Maryland.....Patent Office  
A.B., 1901, Washington and Lee University.
- Ogilby, Charles F. Randolph, Jr.; District of Columbia..1416 F Street
- Otto, Arnold Clarence; Wisconsin.....1723 S Street  
A.B., 1911, Lawrence College; A.B., 1911, The George Washing-  
ton University.
- Packard, Roscoe Milliken; District of Columbia.....Patent Office  
A.B., 1899; A.M., 1900, Western Reserve University.
- Paddock, William Waterman; Iowa.....205 The Sherman
- Phillips, Charles K.; New Jersey.....1627 Lamont Street  
A.B., 1909, Princeton University.
- Preston, Neil De Forest; New York.....1828 California Street  
M.E., 1908, Cornell University.
- Roller, Harry F.; Kansas.....1201 Q Street  
A.B., 1906, University of Kansas.
- Rose, Claude Custer; Ohio.....115 R Street N. E.  
M.E., 1905, Ohio State University.
- Rowland, Guy Edwin; Texas.....1483 Newton Street
- Rush, Clifford Alvin; Kansas.....1517 P Street

Samsel, Albert Charles; Tennessee.....	11 Grant Place
A.B., 1910 Maryville College.	
Schnare, Lester Llewellyn; Georgia.....	The Akron
Shaw, Paul James; Pennsylvania.....	Y. M. C. A.
Smith, Charles Watson; Pennsylvania.....	315 H Street
University of Chicago.	
Smith, Frank Brown; Maryland.....	817 12th Street
Smith, Frank Seymour; District of Columbia.....	1631 16th Street
A.B., 1910, Wesleyan University.	
Stottle, Burr Shearer; Missouri.....	Y. M. C. A.
Straw, Charles Alonzo, Jr.; Massachusetts.....	3014 Dent Place
A.B., 1901, Harvard University.	
Strong, William, Jr.; District of Columbia.....	1208 18th Street
Princeton University.	
Stuart, Ralph Richard; Iowa.....	3000 Q Street
University of Iowa.	
Sutton, Loyd Hall; Massachusetts.....	1323 Clifton Street
S.B., 1903, Massachusetts Institute of Technology.	
Tolbert, James Ora; Iowa.....	Y. M. C. A.
Townsend, Wilson Lewis; Maryland.....	1429 New York Avenue
Walker, Clarence Stevens; Massachusetts.....	Patent Office
A.B., 1904, Harvard University.	
Walker, John Earl; Michigan.....	1402 L Street
S.B., 1907, Kalamazoo College; S.B., 1907, University of Chicago.	
Waters, Joseph H.; District of Columbia.....	623 Kiefer Place
B.S., in E.E., 1910, The George Washington University.	
Watson, Paul Herbert; Kansas.....	1322 Kearney Street N. E.
Wenderoth, Ernest Ferdinand; New York.....	Patent Office
B.S. in E.E., 1910 The George Washington University.	
White, Hubert Shadrach; Virginia.....	1128 6th Street
Eastern College.	
Wilson, Irving Thomas; Maryland.....	504 Southern Building
The George Washington University.	
Woodman, William Hidden; New Jersey.....	1432 M Street
S.B., 1908, Dartmouth College.	
Zacharias, Robert Mathias; Pennsylvania.....	1717 S Street
A.B., 1907, Franklin and Marshall College.	
Zeh, Henry William; District of Columbia.....	1357 Harvard Street
Zirkle, Joseph Claiborne; Virginia.....	635 F Street
The George Washington University.	

## MASTER OF LAWS

DeAtley, Harry B.; Kentucky.....	513 6th Street
LL.B., 1912, Kentucky State University.	
Cohen, George G.; Indiana.....	211 C Street
A.B., 1907; LL.B., 1907, Indiana University; M.Dip., 1912,	
The George Washington University.	

- Kause, Arthur John; District of Columbia...1905 Jackson Street N. E.  
LL.B., 1913, The George Washington University.
- Macfarland, Horace Greeley; District of Columbia....Evans Building  
Graduate, 1891, United States Naval Academy; LL.B., 1912,  
The George Washington University.
- Teodoro, Anastasio R.; Philippine Islands.....31 Raymond Apartment  
A.B., 1908, Ateneo de Manila; LL.B., 1911, Escuela de Derecho  
de Manila.

## REVIEW STUDENTS

- Irion, Harry; Colorado.....131 A Street N. E.  
LL.B., 1907, The George Washington University.

## SPECIAL STUDENTS

- Acker, Isaac Preston; Virginia.....2812 13th Street
- Black, James Earl; New York.....1225 O Street  
The George Washington University.
- Callander, William Forrest; Illinois.....4129 9th Street  
LL.B., 1912, Georgetown University.
- Davis, Meyer; District of Columbia.....1200 Morse Street N. E.
- Dow, William John; Missouri.....2020 North Capitol Street
- Fall, Jack Morgan; New Mexico.....127 Senate Office Building
- Fisher, David; New York.....1108 Columbia Road
- Forbes, Harvey Dwight; New York.....1430 V Street
- Halls, Jay Clarence; Wisconsin.....440 House Office Building  
The George Washington University.
- Hemrich, Ernest Edward; Washington.....715-17 10th Street
- Humphreys, William Yerger; Mississippi.....House Document Room
- Johnston, Thomas Henry; Virginia.....635 F Street
- Koss, Claude E.; District of Columbia.....457 Luray Place  
Phar.D., 1907, The George Washington University.
- Lewis, Horace H.; Washington.....1013 H Street
- Lyons, Lester Harry; Louisiana.....73 The Toronto
- McCurdy, Walter Morrison; West Virginia.....128 Bryant Street
- Merchant, Ernest Howard; Massachusetts.....2164 Florida Avenue  
LL.B., 1912, National University.
- Morgan, William Harper; Alabama.....1432 M Street
- Pagan, Robert; District of Columbia.....1965 Biltmore Street
- Pilcher, Dalton Jefferson; District of Columbia.....216 G Street
- Rust, Breckinridge Cabell; District of Columbia.....McGill Building
- Schnare, Lester Llewellyn; Georgia.....The Akron Apartments  
LL.B. February, 1913, The George Washington University.
- Sexton, Paul L.; Virginia.....1311 P Street
- Shaw, Paul James; Pennsylvania.....Y. M. C. A.  
LL.B., February, 1913 The George Washington University.
- Shawn, Franklin Denwood; Pennsylvania.....War Department
- Shepherd, Alfred William; Idaho.....Brunswick Apartments



Siegfried, Alvin; South Dakota.....	1415 K Street
Sinclair, Beverky Kennon; Virginia.....	1822 I Street
Smith, George Walter; Pennsylvania.....	103 The Wellington
Smith, Waldorf Astor; Louisiana.....	513 H Street
Squair, Frank Roddie; Illinois.....	1615 Swann Street
LL.B., 1912, National University.	
Stone, Frederic N.; Massachusetts.....	Y. M. C. A.
LL.B., 1912; M.P.L., 1912, Georgetown University.	
Stuart, G. Forrest; Idaho.....	1340 Girard Street
Williams, Ashton Hilliard; South Carolina.....	10 B Street N. E.
A.B., 1912, University of South Carolina.	
Willis, George Bullock; Virginia.....	R. F. D. 3, Alexandria, Va.
Wilmer, Joseph Allison; Maryland.....	3006 Cambridge Place
Wilmeth, John F.; District of Columbia.....	618 F Street N. E.
LL.B., 1912, Georgetown University.	
Winkelhaus, William August; Illinois.....	4126 8th Street
Withers, Clyde Forrest; District of Columbia.....	3521 14th Street
Woolley, Arthur; Utah.....	Brunswick Apartments
Wright, Walter Rodney; Missouri.....	218 9th Street N. E.
Zapf, L. Roy; Tennessee.....	836 Rittenhouse Street
LL.B., 1912, Georgetown University.	
Zeh, Henry William; District of Columbia.....	1357 Harvard Street
LL.B., 1912, The George Wahington University.	

## AUDITORS

Kirster, Frank J.; Michigan.....	1219 K Street
University of Michigan.	
Pagan, Robert; District of Columbia.....	1965 Biltmore Street
Sexton, Paul L.; Virginia.....	1311 P Street

## SUMMARY

Candidates for LL.B. Degree.	
First year.....	113
Second year.....	65
Third year.....	89
Total.....	267
Candidates for LL.M. Degree.....	5
Special.....	43
Review.....	1
Auditors.....	3
	319
Duplicates.....	7
Total.....	312

## COLLEGE GRADUATES CANDIDATES FOR DEGREES

Alabama, University of.....	1	Michigan, University of.....	2
Amherst College.....	1	Minnesota, University of.....	1
Ateneo de Manila.....	1	Mississippi Agricultural and	
Austin College.....	1	Mechanical College.....	1
Bates College.....	1	University of Nebraska.....	2
Biltmore Forest School.....	1	Nebraska Wesleyan University	1
Bowdoin College.....	1	Ohio Northern University....	1
Brown University.....	1	Ohio State University.....	3
Charleston, College of.....	1	Pennsylvania State College..	1
Chattanooga, University of..	1	Pennsylvania, University of..	1
Chicago, University of.....	1	Princeton University.....	2
Colby College.....	1	Purdue University.....	4
Colorado, University of.....	1	South Carolina, University of	2
Columbia University.....	2	Swarthmore College.....	1
Cornell University.....	8	Syracuse University.....	2
Cotner University.....	1	United States Naval Academy	7
Dartmouth College.....	3	Utah, University of.....	2
Drake University.....	1	Vermont, University of.....	1
Ewing College.....	1	Wisconsin, University of.....	1
Franklin and Marshall College	1	Washington and Jefferson Col-	
George Washington Univer-		lege.....	1
sity, The.....	12	Washington and Lee Univer-	
Georgia, University of.....	1	sity.....	2
Hamilton College.....	2	Wesleyan University.....	2
Harvard University.....	6	Western Maryland University	1
Illinois College.....	1	Western Reserve University..	1
Indiana University.....	1	Worcester Polytechnic Insti-	
Iowa State College.....	2	tute.....	2
Iowa, State University of....	1	Yale University.....	3
Kalamazoo College.....	2		
Kansas, University of.....	1	Total.....	115
Lawrence College.....	1	Counted twice.....	6
Lehigh University.....	1		
Louisiana State University...	1	Total.....	109
Maryville College.....	1	Candidates for Degrees.....	270
Massachusetts Institute of		Percentage.....	40.3
Technology.....	4		

## DEPARTMENT OF MEDICINE

## CANDIDATES FOR THE DEGREE OF DOCTOR OF MEDICINE

## First Year

*Bair, Schafer Bowers, Phar.D.; Maryland.....	1006 I Street
Bolton, Boyce Richardson; District of Columbia.....	3104 P Street
Brin, Carlos N.; Panama.....	1903 S Street

\* Not in attendance throughout the year.

Catzva, Morris; Russia.....	235 F Street N. E.
Collins, Robert Hugh; Virginia.....	Fort Myer Heights, Va.
Conaway, Austin Ottis; West Virginia.....	911 M Street
Connor, Jack Anthony; District of Columbia.....	2227 1st Street
Cousins, Sidney Charles; District of Columbia....	550 14th Street S. E.
Elmore, Henry Gibson; District of Columbia....	2006 Columbia Road
Fitzhugh, Clark Seals; District of Columbia.....	124 12th Street S. E.
*Flood, Edward Michael; New Jersey.....	1214 12th Street
Folsom, John Eugene; Montana.....	1422 H Street
Garnsey, Orace Betts; Massachusetts.....	924 Massachusetts Avenue
Gordon, Robert John; Wisconsin.....	1121 I Street
Guilhempe, Nemorin; France.....	925 12th Street
*Graf, Frederick M.; Indiana.....	3022 R Street
Grayson, Stewart Maxwell; Virginia.....	Vienna, Va., R. 2
Haskell, Roy Terry; Maryland.....	808 New Jersey Avenue
Huddleston, Jarrett Mathew; District of Columbia..	2504 Hall Place
Katz, Albert; New York.....	224 H Street
Ladd, John Morriss; District of Columbia.....	134 11th Street S. E.
Levy, Edward; New York.....	1322 10th Street
Lynch, Joseph Aloysius, New York.....	905 13th Street
Macon, Edward Bailey, Phar.D.; District of Columbia..	1227 O Street
*McKinley, Henry S.; District of Columbia.....	214 2d Street N. E.
McNally, Thomas Henry, Jr.; Rhode Island.....	717 10th Street
Norton, William Harrison, Phar.D.; New York, 932 Westminster Street	
Northrup, Lewis V., Jr.; New York.....	610 L Street N. E.
Quirk, Jerome Thurston; Virginia.....	1307 R Street
Reuter, Fritz August; District of Columbia.....	1337 Park Road
Rice, Eugene Clarence, Jr.; District of Columbia....	4832 16th Street
Rivera, Pedro Aponte; Porto Rico.....	501 New Jersey Avenue
Rivera, Rafael Aulet; Porto Rico.....	11 Grant Place
Rosenberg, Louis Charles; Connecticut.....	1237 7th Street
Ryan, Frank Kevan; New York.....	1214 12th Street
Schoenfeld, Herbert Herman; District of Columbia ..	3448 34th Place
Simpson, Raymond Cornwell; District of Columbia,	
	123 Maryland Avenue N.E.
Stachniewicz, Vincent J.; New Jersey.....	2634 Woodley Place
Stratton, Ernest Kenneth, Phar.D.; Pennsylvania,	
	Tuberculosis Hospital
Taylor, Sterling Price, Jr.; Maryland...1240 Pennsylvania Avenue S. E.	
Thyson Lee Cromwell, Phar.D.; District of Columbia,	
	1366 Columbia Road
Tilton, Joel Adams, Jr.; District of Columbia.....	1520 29th Street
Walton, Robert R.; Washington	
	George Washington University Hospital
White, Paul Amos, B.S., Ph.B.; Iowa.....	Ventosa Apartment

\* Not in attendance throughout the year.

\*Witten, Louis J.; New York.....George Washington University  
Yarnall, Audra Hopkins; Pennsylvania.....425 9th Street N. E.

### Second Year

Bingman, Carroll E.; Pennsylvania .....601 M Street  
Bost, Thomas Creasy; North Carolina.....942 K Street  
Bradley, Jeter Carroll; North Carolina.....1002 11th Street  
Chamberlin, Frank Tenny, Jr.; District of Columbia....1323 M Street  
Collins, James Harold; Maine.....1435 9th Street  
Craig, Ernest Arthur; Illinois.....1228 Massachusetts Avenue  
Donn, Frederick Y., Ph.D., Ph.C.; District of Columbia,  
1544 New Jersey Avenue  
Gentzkow, Cleon Joseph; Minnesota .....Garfield Hospital  
Green, Eric Steel; New York.....1009 13th Street  
Horn, John W., Jr.; Pennsylvania.....942 K Street  
Kenner, Albert Walton, Phar.D.; District of Columbia 1711 17th Street  
McCray, Arthur Howard, B.S.C., D.V.M.; Ohio, 1322 Vermont Avenue  
Moser, Harry Newton, West Virginia.....425 9th Street N. E.  
Peters, David B.; Virginia.....Government Hospital for Insane  
Putzki, Paul Stirling; District of Columbia....1862 California Street  
Pullen, George W., Jr.; Maine.....1435 9th Street  
Rowlson, Ira Alonzo; New York.....Garfield Memorial Hospital  
Shetter, Andrew George; Pennsylvania.....1307 R Street  
Williams, V. Blackstone; District of Columbia.....1605 30th Street  
Woodward Roy B.; New York .....1435 9th Street

### Third Year

Aston, Melville Joseph; Pennsylvania.....1101 K Street  
Barger, Gervase J. P.; Nebraska.....2224 Decatur Place  
Baynes, Ralph Henry; North Carolina.....926 K Street  
Bloom, Rudolph; Virginia.....458 K Street  
Brown, Edward A., Jr.; New York.....929 K Street  
Cohen, Ralph; District of Columbia.....617 K Street  
\*Dembrosky, William L.; District of Columbia....708 H Street N. E.  
English, Merton Alden; District of Columbia.....1758 Park Road  
Field, Fay; Pennsylvania.....Children's Hospital  
Hardstaff, Roy John; Illinois.....1322 Vermont Avenue  
Harrison, Forrest M.; Virginia.....818 A Street S. E.  
Jones, Floyd Burton; California.....1210 12th Street  
Jova, Andrew Martin; Cuba.....925 12th Street  
Lonsdorf, Jacob J., Jr.; Pennsylvania.....1215 K Street  
Moreno, Joseph deRoulhac; Florida.....1219 K Street  
Miller, Thomas, Jr.; District of Columbia.....1616 7th Street  
Passer, William Federick, Ph.C.; Minnesota ....Children's Hospital

\* Not in attendance throughout the year.



Pitkowitz, Bernard B.; New York.....	1541 M Street
*Robinson, George; New Hampshire.....	823 13th Street
*Stapleton, William Pierce; New Jersey..	George Washington University
Rafter, Robert Read; District of Columbia.....	3105 16th Street
Supplee, Eugene Deyerle; District of Columbia....	311 A Street N. E.
Sze, Tsannyoen Philip; China.....	2750 14th Street
Taylor, Chase; District of Columbia.....	1433 Belmont Street
VanOrnam, Vilas G.; New York.....	1208 K Street
*Wenzell, Albert Gould; District of Columbia.....	1712 17th Street

#### Fourth Year

Corbett, Sewall Munson; Virginia.....	Tuberculosis Hospital
DeSaussure, Richard Laureno; South Carolina, Homeopathic Hospital	
English, Leonard H.; Pennsylvania.....	Garfield Hospital
Fortier, Roy MacLeay; California.....	2310 19th Street
Henneberger, Josiah Baker; Maryland.....	1101 K Street
Lott, Walter Harold; District of Columbia.....	1101 K Street
Mooers, Harold Alonzo; District of Columbia....	Takoma Park, D. C.
Regan, Louis John; New York.....	1208 K Street
Riley, Albert Austin; Ohio.....	1375 Columbia Road
Stout, Joseph Duerson, A.B.; District of Columbia....	1435 9th Street
Turner, May, S.B.; District of Columbia.....	453 Irving Street

#### SUMMARY

First Year.....	46
Second Year.....	20
Third Year.....	26
Fourth Year.....	11
	<hr/>
	103

#### DEPARTMENT OF DENTISTRY

##### CANDIDATES FOR THE DEGREE OF DOCTOR OF DENTAL SURGERY

#### First Year

*Battista, Alberto D.; Italy.....	221 1st Street
*Brill, Nathan P.; District of Columbia.....	2601 Georgia Avenue
Brower, Delmer D.; District of Columbia.....	704 K Street N. E.
Browne, Wilmer M.; New York.....	1433 New Jersey Avenue
*Brustein, Joseph; Pennsylvania.....	1544 9th Street
Carr, Josiah L.; Texas.....	1204 K Street
*Crawley, Clarence John; District of Columbia....	1420 A Street N. E.
*Evansha, John Frank; Pennsylvania.....	508 10th Street
Frazier, Griffin Guy; District of Columbia.....	11 Grant Place

\* Not in attendance throughout the year.

- Friedman, Joseph Altshuler; District of Columbia....1817 5th Street  
 \*Goldsmith, Clarence K.; Maryland.....Station L, D. C.  
 Hall, Arthur R.; District of Columbia...1300 Maryland Avenue N. E.  
 \*Henderson, I. Parnell; Georgia.....1300 Rhode Island Avenue  
 \*Hibbs, John Edward; Kentucky,

Care of Interstate Commerce Commission

- \*Jensen, Julius Christian; Iowa.....1343 L Street  
 Lewis, Ellis S.; Virginia.....School Street, Box 21, Ballston, Va.  
 McNally, Benjamin Raymond; Rhode Island.....1220 G Street  
 Minkin, Golda; District of Columbia.....412 P Street  
 Palkin, Joseph Ralph; District of Columbia.....1736 15th Street  
 \*Puzrin, Nathan; Russia.....69 G Street  
 Sampsell, Thomas Lloyd; District of Columbia.....730 12th Street  
 Sandberg, Adolph; Massachusetts.....1402 14th Street  
 Slack, Edward Markorn; District of Columbia.....417 6th Street  
 \*Thayer, David R.; Michigan,

Care of Depot Quartermaster U. S. Army

Thompson, Richard Knight; District of Columbia,

484 Maryland Avenue S. W.

- Thompson, James Gray; District of Columbia, 1207 East Capitol Street  
 Tilley, Edwin Ross; District of Columbia.....3525 10th Street  
 Urrows, Harold; Massachusetts.....102 I Street  
 \*Valaer, Peter, Jr.; North Carolina.....708 19th Street  
 \*Varela, E. R.; District of Columbia.....1004 E. Capitol Street  
 Wagner, Lawrence R.; New York.....802 L Street  
 Walze, Carl W.; Pennsylvania.....459 Massachusetts Avenue  
 \*Weir, Samuel Alfred; Virginia.....Fort Myer, Va.  
 \*Wolling, Meredith R.; South Carolina.....1747 F Street  
 Wrisinski, Leo J.; Illinois.....623 19th Street

Second Year

- Beebe, Ira Dow; Connecticut.....1020 9th Street  
 Bonseigneur, Camille Robespierre; District of Columbia..1311 E Street  
 Callar, Donald; Pennsylvania.....828 12th Street  
 Danemann, Samuel; Russia.....317 C Street  
 Davis, Albert Wendell; Tennessee.....218 F Street N. E.  
 Fansler, Orville Newton; Nebraska.....Bethesda, Md.  
 Forbes, William E.; New York...Princeton Apartments, 1430 V Street  
 Gardner, Albert P.; Ohio...Naval Medical School, 24th and E Streets  
 Ginsberg, Samuel B.; District of Columbia.....1234 I Street  
 Golden, Edward Earl; Wyoming.....1720 Newton Street  
 Guilhempe, Nemorin; France.....925 12th Street  
 Hagen, Walter L.; New York.....501 2d Street N. E.  
 Haywood, Markley R.; New York.....1217 E. Capitol Street  
 Hogan, Arnold Wilbur; Virginia.....933 G Street

\* Not in attendance throughout the year.

King, Mansfield Venable; Virginia.....	1323 F Street
Mead, Sterling Vernon; Kansas, The Norwood, Apt. 12, 1443 E. Capitol Street	
Prendergast, Benjamin Frank; District of Columbia.....	465 G Street
Roberts, Jasper Newton; Tennessee.....	1307 H Street
Smith, Jesse K.; Virginia.....	Room 332, Treasury Building
Walls, Harry E.; Georgia.....	1234 I Street

**Third Year**

Achsan, Samuel Charles; New York.....	3501 14th Street
Alley, Edward C.; Kentucky.....	1722 Pennsylvania Avenue
Briggs, Elmer E.; Pennsylvania.....	1419 Ames Place N. E.
Brodsky, Marie G.; Russia.....	646 Pickford Street N. E.
Durfee, Claude; Illinois.....	3501 14th Street
Eisenstein, Nathan; Massachusetts.....	825 Vermont Avenue
Hardester, John S.; District of Columbia.....	912 I Street
Maphis, Carl Burdette; Virginia.....	333 C Street
Marstella, John P.; Illinois.....	17 R Street N. E.
Rich, Charles W.; Pennsylvania.....	1006 K Street N. E.
Silliman, Walter Brittin; Pennsylvania.....	915 New York Avenue
Spillan, Henry Merle; New York.....	1319 Fairmont Street
White, George Elwood; Massachusetts.....	1936 Calvert Street
Williams, Edward; New York.....	3025 11th Street

**Special**

Bear, Ewing Marvin W., D.D.S.; District of Columbia....	620 I Street
---	--------------

**SUMMARY**

First Year.....	35
Second Year.....	20
Third Year.....	14
Special.....	1
	—
	70

**NATIONAL COLLEGE OF PHARMACY****CANDIDATES FOR THE DEGREE OF DOCTOR OF PHARMACY****Freshmen**

Adams, William S.; District of Columbia.....	713 6th Street N. E.
Arnold, Howard L.; Virginia....	222 N Patrick Street, Alexandria, Va.
Bayne, Thomas A.; Virginia.....	207 S. Fairfax Street, Alexandria, Va.
Bronson, William J.; District of Columbia.....	3441 14th Street
Boehme, Leslie E.; Virginia.....	1352 B Street S. W.
Borland, Anna May; Michigan.....	The New Berne

Biggins, James; District of Columbia.....	1328 34th Street
Brown, Andrew Jackson; North Carolina.....	619 East Capitol Street
Cowling, Herford T.; Virginia.....	938 K Street
Evans, Ethel Juliet; District of Columbia..	The Stafford, Lanier Place
Furbershaw, Joseph A.; New York.....	80 R Street
Goldstein, Morris G.; Russia.....	458 P Street
Kerfoot, Garland S.; Virginia.....	69 W Street
Kenner, Harvey R.; District of Columbia.....	1711 17th Street
Lawson, James H.; North Carolina.....	815 C Street N. E.
Lear, Israel; Russia.....	1253 9th Street
Mentzel, Kurt Otto; Wisconsin.....	3224 13th Street
Malone, William W.; District of Columbia,	
	305 Pennsylvania Avenue S. E.
McLoughlin, Joseph; Pennsylvania.....	237 New Jersey Avenue
Modena, Erwin; Virginia.....	16 3d Street S. E.
Norris, Earl M.; Maryland.....	130 Randolph Street
Symonds, Joseph L.; Maryland.....	925 12th Street
Tibbets, Lyman B.; District of Columbia.....	1636 17th Street
Vestal, Paul W.; North Carolina.....	7th and Massachusetts Avenue
Williams, Clyde G.; Pennsylvania.....	1014 Pennsylvania Avenue S. E.
Wedding, William C.; District of Columbia.....	18 6th Street N. E.

#### Juniors

Biggs, John G.; District of Columbia.....	621 Irving Street
Blackistone, Beulah L.; District of Columbia.....	1548 8th Street
Burgher, Vincent A.; New Jersey.....	1304 Park Road
Crisp, Thomas B, Jr.; District of Columbia.....	638 E Street N. E.
Carroll, John M.; District of Columbia.....	1442 Florida Avenue
Donohoe, Walter J. A.; New York.....	1808 1st Street
Donahue, T. Francis; District of Columbia.....	3345 P Street
Fink, James A.; District of Columbia.....	1826 15th Street
Heller, Theodore J.; District of Columbia.....	740 7th Street S. E.
Hall, Earle R.; Iowa.....	1333 Columbia Road
Kimball, Clarence V.; North Carolina.....	1850 Park Road
Koss, Flavelle E.; District of Columbia.....	1814 Calvert Street
Lantz, Samuel A.; Virginia.....	1377 Irving Street
Murphy, John A.; Pennsylvania.....	301 Pennsylvania Avenue S. E.
LL.B., Georgetown University.	
McCambridge, Joseph A.; District of Columbia.....	604 22d Street
Moose, George K.; North Carolina.....	1100 14th Street
Pettit, Robert F.; District of Columbia.....	403 2d Street S. E.
Ros, Carlos M.; Panama.....	1021 8th Street
Stephens, William A.; Kentucky.....	703 15th Street
Snyder, Frank J.; Arkansas.....	1000 24th Street
Weil, Albert; District of Columbia.....	Alexandria, Va.



**Seniors**

Barker, Charles W.; Maryland . . . . .	Room 322, Post Office Department
Chamblin, Ralph V.; Virginia . . . . .	Herndon, Va.
Dudley, Frederick E., Jr.; District of Columbia . . . . .	Takoma Park, D. C.
Hohberger, Samuel J.; Maryland . . . . .	35 Q Street N. E.
Kinsey, Raymond D.; District of Columbia . . . . .	459 G Street S. W.
Kloczewski, Albert M.; District of Columbia . . . . .	5th and G Streets
Mix, Anna E.; Maryland . . . . .	113 Maryland Avenue N. E.
Maxwell, David L.; Tennessee . . . . .	21st and G Street
Swann, Edwin A.; Maryland . . . . .	Naval Hospital, D. C.
Snider, Clyde F.; Kansas . . . . .	24th and E Street
Smyser, Bert A.; Pennsylvania . . . . .	446 Kentucky Avenue S. W.
Tennyson, Irving A.; Virginia . . . . .	Alexandria, Va.
Umhau, John W.; District of Columbia . . . . .	731 10th Street S. E.
Whittlesey, William H., Jr.; Ohio . . . . .	3407 Holmead Place
Whitley, Lawrence B.; North Carolina . . . . .	26 Q Street

**Taking Special Courses**

Barnett, William D. (Chemistry); Texas . . . . .	3845 Davenport Place
Rosenberg, Louis C. (Chemistry); Connecticut . . . . .	709 P Street

**SUMMARY**

Freshman Class . . . . .	26
Junior Class . . . . .	21
Senior Class . . . . .	15
Specials . . . . .	2
	—
	64

**COLLEGE OF VETERINARY MEDICINE****CANDIDATES FOR THE DEGREE OF DOCTOR OF VETERINARY MEDICINE****Freshmen**

Biondi, Harry J.; District of Columbia . . . . .	508 7th Street S. E.
Brown, Herbert H.; Missouri . . . . .	922 L Street
Buffin, Kenneth E.; Maryland . . . . .	1317 F Street
Grubb, W. Hugh; Virginia . . . . .	1408 Belmont Street
Lynn, William M.; North Carolina . . . . .	115 I Street
Rippon, Charles William; Pennsylvania . . . . .	1322 W Street
Sipos, Andrew J.; Virginia . . . . .	2115 14th Street
Skippon, Charles D.; Pennsylvania . . . . .	2008 1st Street
Tucker, Ira L.; Virginia . . . . .	1511 28th Street
Wilcox, Floyd P.; New York . . . . .	1117 8th Street

**Juniors**

Cashell, Irving M.; Maryland.....	2907 Sherman Avenue
Chapin, Judson Kerfoot; Virginia.....	1401 5th Street
Colflesh, Joseph Harmon; Pennsylvania.....	1408 Belmont Street
Cook, Parley Mere; Ohio.....	1303 R Street
Crawford, Arthur Burdeck; Massachusetts.....	1712 15th Street
Esses, John James; Maryland.....	744 Morton Street
Forbes, Samuel Dexter; Virginia.....	2115 14th Street
Gantz, Claudius R.; District of Columbia.....	1206 D Street
Getz, Harry Rohrer; Pennsylvania.....	1303 R Street
Grenfell, Frederick Aloysius; District of Columbia.....	1916 H Street
Hayes, Jesse; New Jersey.....	1325 New York Avenue
Kelser, Raymond Alexander; District of Columbia,	231 14th Street N. E.
Lundsten, Edwin; Minnesota.....	Navy Department
Miller, Howard Sydnor; Virginia.....	The Fredonia.
Munro, Joseph Briggs; Rhode Island.....	2707 11th Street
Reynolds, François H. K.; Wisconsin.....	240 2d Street N. E.
Shillinger, Jacob Edward; Maryland.....	1330 W Street
Trigg, William S.; Virginia.....	2116 Flagler Place
Whitney, Clifford Caswell; Massachusetts.....	1128 B Street N. E.

**Seniors**

Behney, Jacob E.; Pennsylvania.....	2115 14th Street
Craig, Norman Chandler; Pennsylvania.....	26 Iowa Circle
Gillette, George H.; Kansas.....	26 Iowa Circle
Hargett, Ernest George; North Carolina.....	310 3d Street
Hooker, William Anson; Massachusetts.....	1829 G Street
Lambert, Fred W.; Maryland.....	778 Hobart Place
McLaughlin, Joseph Edward; Illinois.....	1400 Chapin Street
Morcock, Julius Edward; Georgia.....	2115 14th Street
Nicol, James Buchanan; Virginia.....	1444 W Street
Potteiger, Clarence B.; Pennsylvania.....	1400 Chapin Street

**SUMMARY**

Freshman.....	10
Juniors.....	19
Seniors.....	10

## GEOGRAPHICAL DISTRIBUTION

Alabama.....	3	Oklahoma.....	5
Arizona.....	2	Pennsylvania.....	86
Arkansas.....	4	Rhode Island.....	5
California.....	6	South Carolina.....	11
Colorado.....	11	South Dakota.....	7
Connecticut.....	8	Tennessee.....	14
Delaware.....	3	Texas.....	15
District of Columbia.....	526	Utah.....	11
Florida.....	3	Vermont.....	8
Georgia.....	6	Virginia.....	90
Idaho.....	5	Washington.....	11
Illinois.....	28	West Virginia.....	8
Indiana.....	14	Wisconsin.....	18
Iowa.....	26	Wyoming.....	2
Kansas.....	12	Canada.....	1
Kentucky.....	11	China.....	5
Louisiana.....	5	Columbia.....	1
Maine.....	10	Cuba.....	1
Maryland.....	64	Dominican Republic.....	1
Massachusetts.....	42	France.....	1
Michigan.....	19	Germany.....	3
Minnesota.....	13	Greece.....	1
Mississippi.....	3	Holland.....	1
Missouri.....	14	Honduras.....	1
Montana.....	4	Mexico.....	1
Nebraska.....	18	Nova Scotia.....	1
New Hampshire.....	4	Panama.....	2
New Jersey.....	20	Porto Rico.....	4
New Mexico.....	5	Russia.....	6
New York.....	70	Sweden.....	1
North Carolina.....	22	Switzerland.....	1
North Dakota.....	2		
Ohio.....	33		
			1347

## GENERAL SUMMARY

## TEACHING STAFF

In many instances members of the Teaching Staff give only part time to the University:

Professors.....	68	
Associate Professors.....	10	
Associates.....	13	
Assistant Professors.....	19	
Lecturers and Instructors.....	68	
Assistants and Demonstrators.....	14	
	<hr/>	
Total.....	192	

## STUDENTS REGISTERED IN THE UNIVERSITY, 1912-1913

## Department of Arts and Sciences

School of Graduate Studies.....	92	
Columbian College.....	353	
College of Engineering and Mechanic Arts.....	196	
College of the Political Sciences.....	56	
Teachers College.....	87	
	<hr/>	
	784	

Duplicates.....	6	778
-----------------	---	-----

## Professional Department

Department of Law.....	312	
Department of Medicine.....	103	
Department of Dentistry.....	70	
	<hr/>	
	485	

Duplicates.....	1	484
-----------------	---	-----

## Associated Colleges

National College of Pharmacy.....	64	
College of Veterinary Medicine.....	39	103
	<hr/>	
		1365
Duplicates.....		18
	<hr/>	
Total Registrations for the Year.....		1347



# DEGREES CONFERRED

## AT FALL CONVOCATION, 1912

### IN COURSE

#### Bachelor of Arts

Hsiao Min Louis ..... China

#### Bachelor of Laws

Eugene Webster Bond ..... Illinois

Guy Edwin Rowland ..... Texas

Henry William Zeh ..... District of Columbia

#### Doctor of Medicine

True S. Burgess ..... Arkansas

Richard Vernon Pitt ..... Virginia

#### Doctor of Dental Surgery

Caleb Willard Camalier ..... District of Columbia

A. Alfredo Rubira, D. .... Ecuador

Washington Clarence Zepp ..... New Jersey

## AT WINTER CONVOCATION, 1913

### IN COURSE

#### Doctor of Philosophy

Marcus Ward Lyon, Jr. .... New Jersey

B.P., 1897, Brown University; S.M., 1900, M.D., 1902, George

Washington University.

#### Master of Science

Luther Welsh ..... Missouri

Graduate, 1909, United States Naval Academy.

Theodore Stark Wilkinson, Jr. .... District of Columbia

Graduate, 1909, United States Naval Academy.

#### Bachelor of Arts

Gertrude Richardson Brigham ..... Massachusetts

Francis Edward Carter ..... Virginia

John Paton Fleming.....	Virginia
John Joseph Lenney.....	Virginia
Joseph Fels Ritt.....	New York
Harold Ellsworth Warner.....	District of Columbia

**Bachelor of Science**

Halsey Dunwoody.....	District of Columbia
(As of the class of 1903.) Graduate 1905, United States Military Academy.	
Waldo Lasalle Schmitt.....	District of Columbia

**Bachelor of Laws**

Charles Wesley Gerard.....	District of Columbia
A.B., 1906, Ohio State University.	
Leon Clifton Guphill.....	Maine
A.B., 1909, Colby College.	
Charles Taft Hawley.....	Massachusetts
S.B., 1898, M.E., 1908, Worcester Polytechnic Institute.	
Arthur John Kause.....	District of Columbia
Ray Dudley Lillie.....	Michigan
A.B., 1904, University of Michigan.	
James Ballard Moore.....	District of Columbia
Roy Lyman Neuhauser.....	District of Columbia
A.B., 1909, George Washington University.	
Lester Llewellyn Schnare.....	Georgia
Paul James Shaw.....	Pennsylvania
Loyd Hall Sutton.....	Massachusetts
With Distinction.	
S.B., 1908, Massachusetts Institute of Technology.	

**Bachelor of Law**

Max Warburton Davis.....	Connecticut
M.E., 1908 Cornell University.	

# ALLIED ASSOCIATIONS

## ALUMNI ASSOCIATIONS

### THE GENERAL ASSOCIATION

Officers, 1912-13

*President*

J. HOLDSWORTH GORDON

*Vice-Presidents*

JOSEPH STEWART  
E. A. BYRNES  
T. N. McLAUGHLIN

L. RUSSELL ALDEN  
E. L. THURSTON  
C. C. CALHOUN

*Secretary*

H. L. HODGKINS

*Treasurer*

JOHN B. LARNER

### *Executive Committee*

J. HOLDSWORTH GORDON, *Chairman*

HOWARD L. HODGKINS, *Secretary*

L. RUSSELL ALDEN  
HENRY P. BLAIR  
DR. W. R. BOYER  
E. ROGER BOYLE  
EUGENE A. BYRNES  
C. C. CALHOUN  
DR. E. M. COLVIN  
HARRY C. DAVIS  
H. BLAKE GORDON  
PERCIVAL HALL

DR. A. W. KENNER  
JOHN B. LARNER  
PHILIP F. LARNER  
DR. T. N. McLAUGHLIN  
DR. N. W. POMEROY  
MASON N. RICHARDSON  
JOSEPH STEWART  
DR. MILLARD F. THOMPSON  
ERNEST L. THURSTON  
WILLIAM J. WALLIS

DR. J. J. WHARTON

Since its organization in 1821, the University has conferred 7912 degrees upon 6390 persons.

The Secretary of the General Alumni Association, whose office is at the University, endeavors to keep a list of the addresses of all Alumni. His catalogue now contains the addresses of about 4200 graduates. It is known that about 1300 are dead, and information is lacking in regard to the others. All Alumni are urged to keep the Secretary informed of any change of address or occupation, and to supply information in regard to their fellow Alumni.

## NEW YORK ALUMNI ASSOCIATION

*President*, FRITZ V. BRIESEN*Secretary*, ALMON C. KELLOGG, 30 Broad Street

## COLORADO ALUMNI ASSOCIATION

*President*, CLARENCE A. BRANDENBURG*Secretary*, PAUL M. CLARK, Symes Building, Denver, Colorado

## SALT LAKE CITY ALUMNI ASSOCIATION

*President*, DR. WILLIAM F. BEER*Secretary*, CULBERT L. OLSON, 1121 Boston Building

## PUGET SOUND ALUMNI ASSOCIATION

*President*, JUDGE H. F. GARRETSON*Secretary*, JOHN ARTHUR, New York Building, Seattle, Washington

## LOS ANGELES ALUMNI ASSOCIATION

*President*, H. E. HAAS*Secretary*, C. R. NAFF, 409 Chamber of Commerce

## SAN FRANCISCO ALUMNI ASSOCIATION

*President*, MONTAGUE T. MOSES*Secretary*, WILEY F. CRIST, Monadnock Building

## OREGON ALUMNI ASSOCIATION

*President*, H. A. CONNOR.*Secretary*, H. S. FORRER, Board of Trade Building, Portland Oregon

## SPOKANE ALUMNI ASSOCIATION

*President*, CHARLES R. CONNOR.*Secretary*, THOMAS A. SCOTT, The Rookery

## MINNESOTA ALUMNI ASSOCIATION

*President*, EDMUND S. DURMENT*Secretary*, F. G. STUTZ, West Publishing Company, St. Paul.



THE COLUMBIAN WOMEN

*President*

MRS. MARTIN A. KNAPP

*First Vice-President*

MISS ELIZABETH PEET

*Second Vice-President*

MRS. ALDIS B. BROWNE

*Corresponding Secretary*

MISS M. E. FORD

*Recording Secretary*

MISS K. KOETZ

*Treasurer*

MISS ANNA S. HAZELTON

*Historian*

MRS. H. T. A. LEMON.

BOARD OF LADY MANAGERS OF THE UNIVERSITY HOSPITAL

*President*

MRS. EUGENE BYRNES

*First Vice-President*

MRS. MARTIN A. KNAPP

*Second Vice-President*

MRS. OSCAR A. MECHLIN

*Corresponding Secretary*

MRS. W. MCKAYE STOWELL

*Recording Secretary*

MRS. WILLIAM C. BORDEN

*Treasurer*

MRS. S. E. LEWIS



## DIRECTORY

### OFFICERS OF GOVERNMENT, ADMINISTRATION, AND INSTRUCTION

The number enclosed in brackets indicates the page in this catalogue on which may be found the full name, degree and title of the officer.

ABBE, T., [36].....	1819 M Street
ACKER, G. N., [32].....	913 16th Street
ALDEN, L. R., [35].....	809 L Street
ALDERMAN, Z. W., [37].....	Kenois Building
AMMERMAN, C. C., [37].....	2314 18th Street
ASH, P., [33].....	Cosmos Club
ASHLEY, R. S., [37].....	1100 M Street
AUSTIN, O. P., [35].....	1620 Massachusetts Avenue
BALDWIN, A. H., [37].....	Bureau of Foreign and Domestic Commerce
BARNES, F. M., Jr., [37].....	Government Hospital for Insane
BARNES, N. P., [34].....	212 Maryland Avenue N.E.
BARTSCH, P., [33].....	2416 14th Street
BASSETT, C. T., [34].....	1409 L Street
BASSLER, R. S., [35].....	U. S. National Museum
BEEKMAN, D. D., [34].....	New District National Bank Building
BEESON, L. W., [171].....	664 Massachusetts Avenue
BERNHARD, J. W., [37].....	710 14th Street
BEYER, H. G., [28].....	1725 H Street
BIBB, A. B., [33].....	1858 Columbia Road
BLAIR, G., [28].....	Union Trust Building
BORDEN, D. L., [37].....	Columbia Hospital
BORDEN, W. C., [33].....	1801 California Street
BOVÉE, J. W., [32].....	The Rochambeau
BRADBURY, H. M., [171].....	1304 Park Road
BRADBURY, W. H., [171].....	1304 Park Road
BRANDENBURG, E. C., [33].....	344 D Street
BRIDE, W. W., [176].....	Westory Building
BRIGGS, J. B., [35].....	1628 K Street
BROWNE, A. B., [28].....	1855 Wyoming Avenue
BUCK, J. M., [176].....	933 K Street
BUCKINGHAM, D. E., [176].....	2113 14th Street
BUHRMAN, A. G., [36].....	Clerk's Office, City Hall
BUTLER, H. K., [171].....	327 11th Street S.E.
BUTLER, W. K., [33].....	1207 M Street

CABELL, J. M., [34].....	The Rochambeau
CALL, A. D., [37].....	1329 Harvard Street
CAMPBELL, C. B., [28, 171].....	1668 Park Road
CARMICHAEL, R. B., [33].....	818 17th Street
CARROLL, M., [33].....	Cleveland Park
CHIPMAN, C., [36].....	629 G Street S.W.
CHURCH, M., [32].....	1608 20th Street
CHURCHILL, G. M., [36].....	205 The Newton
CLARKE, F. W., [32].....	Cosmos Club
CLAYTOR, T. A., [32].....	1315 New Hampshire Avenue
CLEPHANE, W., [33].....	Chevy Chase, Md.
COBB, R., [35].....	1742 R Street
COBEY, A. D., [37].....	613 15th Street
CONKLIN, C. B., [36].....	1342 R Street
CONSTANTINI, C. L., [36].....	The Wellington
COPELAND, E. P., [35].....	The Rockingham
COULTER, J. L., [36].....	908 15th Street
CRAIG, H. K., [30].....	1224 I Street
CRANE, A. B., [34].....	916 14th Street
CURTIS, H. L., [37].....	U. S. Bureau of Standards
DAVIS, C. L., [37].....	1355 Harvard Street
DAVIS, H. C., [28].....	1006 Massachusetts Avenue
DE FARGES, J. R., [34].....	1223 Vermont Avenue
DONNALLY, H. H., [34].....	1612 I Street
DULANEY, H. R., [176].....	1320 F Street
DUNSTAN, E. V., [34].....	3616 Newark Street
DYE, H. S., [36].....	1406 L Street
EARNEST, J. P., [33].....	2123 N Street
EASTERDAY, H. C., [171].....	101 G Street
ELLIOTT, H. R., [35].....	The Farragut
EPPLEY, J. K., [171].....	1417 Belmont Street
EUSTIS, W. C., [176].....	1611 H Street
FERSON, M. L., [35].....	1020 17th Street
FETTER, H. H., [177].....	3013 Dumbarton Avenue
FINLEY, M. F., [37].....	1925 I Street
FLATHER, W. J., [28].....	2033 R Street
FLEMER, L., [171].....	701 Maryland Avenue N.E.
FLOYD, H. B., [171].....	The Alabama
FOWLE, F. E., Jr., [35].....	Smithsonian Institution
FRANKLAND, W. A., [35].....	1300 Massachusetts Avenue
FRANKLIN, E. T. M., [36].....	1315 19th Street
FRANZ, S. I., [33].....	Government Hospital for Insane
FRASER, E., [35].....	1501 Park Road
FRASER, W. W., [37].....	Patent Office
FRENCH, W. J., [36].....	1736 18th Street
FULLER, H. G., [36].....	The Farragut



GARNETT, A. Y. P., [36].....	1409 Hopkins Place
GILL, T. N., [32].....	Cosmos Club
GORDON, H. H., [36].....	1310 Girard Street
GRAYBILL, H. W., [176].....	1828 15th Street
GREGORY, C. N., [34].....	2139 Wyoming Avenue
GRUBB, C. M., [176].....	2320 Ontario Road
HAGNER, F. R., [33].....	1725 N Street
HALL, A., Jr., [33].....	Naval Observatory
HANCOCK, W. E., [37].....	Takoma Park
HARRINGTON, G. T., [37].....	612 Randolph Street
HARRIS, A. L., [35].....	1505 Lamont Street
HARRISON, M. E., [37].....	The New Berne
HELLER, L., [177].....	2908 13th Street
HENDRY, M. W., [37].....	Bethesda, Md.
HENNING, G. N., [33].....	1728 20th Street
HENRY, F. C., [171].....	703 15th Street
HICKS, T., [176].....	621½ Park Road
HIGGINS, M. E., [34].....	The Benedick
HILL, E. A., [35].....	1221 K Street
HILTON, S. L., [171].....	2140 L Street
HODGKINS, H. G., [36].....	Naval Observatory
HODGKINS, H. L., [32].....	1830 T Street
HOLMES, C. W., [30].....	1360 Fairmont Street
HOOTON, P. R., [37].....	1825 U Street
HOPKINS, A., [28].....	1826 Massachusetts Avenue
HOPKINS, H. C., [36].....	The Rochambeau
HOPKINS, N. M., [35].....	2128 Bancroft Place
HOPKINS, T. S., [28].....	Hibbs Building
HORNADAY, F. A., [34].....	3509 14th Street
HORNBAKER, J. N., [177].....	3917 Kansas Avenue
HOWARD, B. J., [171].....	1366 North Carolina Avenue N.E.
HULL, J. A. T., [176].....	1833 V Street
HUMPHREYS, W. J., [34].....	Cosmos Club
HUNT, A. L., [36].....	The Burlington
HUNTER, O. B., [34].....	2021 H Street
HYDE, C. W., [36].....	The Plymouth
INGERSOLL, E. H., [37].....	2118 3d Street N.E.
JACKSON, V. B., [36].....	1332 I Street
JONES, H. C., [35].....	The Earlington
KALUSOWSKI, H. E., [171].....	808 I Street
KEATS, H., [37].....	2449 18th Street
KELLEY, J. T., [35].....	1312 15th Street
KEMBLE, A., [36].....	The Cecil

- KERFOOT, W. T., [171].....69 W Street  
 KERN, R. R., [35].....The Woodworth  
 KERR, H. H., [36].....1742 N Street  
 KIBLER, A. L., [37].....1715 35th Street  
 KILLINGER, W. C., [37].....Northeast corner 13th and I Streets  
 KING, A. F. A., [32].....1315 Massachusetts Avenue  
 KING, W. B., [28].....728 17th Street  
 KOLLIG, MATTHEW, [34].....1325 H Street  
 KRAMER, S. E., [35].....1725 Kilbourne Place  
  
 LAGARDE, L. A., [33].....2624 Woodley Place  
 LARNER, J. B., [28].....1709 19th Street  
 LATIMER, J. W., [35].....Fendall Building  
 LAWRENCE, W. F., [34].....1616 I Street  
 LAWSON, H. W., [34].....1117 Vermont Avenue  
 LAYTON, R. E., [37].....1311 Wisconsin Avenue  
 LECOMTE, R. M., [37].....911 16th Street  
 LEECH, F., [35].....1372 Columbia Road  
 LISNER, A., [28].....1723 Massachusetts Avenue  
 LITTLEHALES, G. W., [34].....2132 Le Roy Place  
 LOCHBOEHLER, H. A., [176].....1320 W Street  
 LOCKWOOD, J., [176].....910 1st Street  
 LOGIE, B. R., [36].....1792 Columbia Road  
  
 MACDONALD, G. B. R., [36].....4th and Pennsylvania Avenue S.E.  
 MACFARLAND, H. B. F., [28].....1420 New York Avenue  
 MCKIMMIE, O. A. M., [36].....1317 Rhode Island Avenue  
 MACMILLAN, J. T., [37].....600 Maryland Avenue N. E.  
 MCNEIL, H. C., [35].....1210 Decatur Street  
 MCNEMAR, L. C., [35].....1713 S Street  
 MALLORY, W. J., [36].....1720 Connecticut Avenue  
 MANN, A., [33].....Department of Agriculture  
 MEARNS, W. A., [28].....2301 S Street  
 MECHLIN, O. A., [34].....3203 R Street  
 MENGE, G. A., [171].....1749 Lanier Place  
 MERRILL, G. P., [32].....U. S. National Museum  
 MERRILL, W. H., [36].....1915 14th Street  
 MILLER, G. B., [34].....1730 H Street  
 MOORE, B. F., [35].....1617 S Street  
 MOORE, W. C., [35].....2321 18th Street  
 MOORE, W. L., [34].....Rockville, Md. R.F.D.  
 MORGAN, J. D., [33].....919 15th Street  
 MORSE, R. W., [36].....Patent Office  
 MORTIMER, C. W., [35].....The Woodworth  
 MUNCASTER, A., [171].....482 Louisiana Avenue  
 MUNROE, C. E., [32].....2115 S Street

NICHOLS, J. B., [34].....	1321 Rhode Island Avenue
NORRIS, J. W., [176].....	1320 W Street
NOYES, T. W., [28].....	1730 New Hampshire Avenue
NUTTING, P. G., [35].....	Bureau of Standards
ODOR, C. L., [34].....	906 G Street
O'HARA, W. H., [176].....	2414 N. Capitol Street
PAGAN, A. E., [39].....	1965 Biltmore Street
PERKINS, H. C., [28].....	1701 Connecticut Avenue
PETER, A., [33].....	Washington Loan and Trust Building
POPE, J. E., [36].....	Tariff Commission, Treasury Department
POTTER, G. M., [176].....	1736 G Street
PRENTISS, D. W., [33].....	1213 M Street
PRICE, T. M., [35].....	The Iowa
RANDOLPH, B. M., [33].....	1744 N Street
REICHELDERFER, L. H., [33].....	1721 Connecticut Avenue
RICHARDSON, C. W., [32].....	1317 Connecticut Avenue
RICHARDSON, E. E., [34].....	404 7th Street S.W.
RICHARDSON, W. S., [171].....	316 4½ Street S.W.
RIGGLES, J. L., [35].....	1424 K Street
RILEY, E. H., [177].....	Beltsville, Md.
RUEDIGER, W. C., [33].....	1454 Euclid Street
RUFFIN, STERLING, [32].....	1335 Connecticut Avenue
RUSSELL, F. F., [33].....	Army Medical Museum
RUST, T. L., [36].....	1408 L Street
RUTTER, F. R., [37].....	1442 Belmont Street
SCHMIDT, A. F. W., [34].....	35 Bryant Street
SCHOENFELD, H., [32].....	3448 34th Street, Cleveland Park
SCHWINN, G. H., [36].....	Government Hospital for Insane
SEIBERT, E. G., [35].....	916 14th Street
SHANDS, A. R., [32].....	901 16th Street
SHARP, G. M., [37].....	The Rochambeau
SHOEMAKER, C. G., [36].....	826 Connecticut Avenue
SHUTE, D. K., [32].....	1719 De Sales Street
SIMPSON, C. A., [35].....	The Dresden
SINGLETON, W. H., [28].....	2020 H Street
SMALL, W. S., [35].....	1340 Irving Street
SMITH, C. S., [33].....	2122 H Street
SNYDER, A. A., [33].....	3051 N Street
SOWERS, W. F. M., [34].....	1707 Massachusetts Avenue
STAFFORD, W. P., [33].....	1603 Kenesaw Avenue
STARR, F. C., [35].....	2812 13th Street
STAVELY, A. L., [33].....	1744 M Street

STERNBERG, G. M., [33].....	2005 Massachusetts Avenue
STOCKARD, M., [37].....	1627 Lamont Street
STOCKTON, C. H., [28].....	2019 O Street
STUART, A. T., [28].....	The Wyoming
SWETT, O. D., [35].....	Chevy Chase, Md.
SWISHER, C. C., [33].....	Cosmos Club
TAYLOR, J. W., [36].....	650 E. Capitol Street
THOMPSON, H. C., [32].....	3500 13th Street
THOMPSON, J. F., [32].....	The Rochambeau
THOMPSON, J. L., [36].....	805 12th Street
TIBBETS, A. P., [36].....	Casualty Hospital
TITUS, E. W., [37].....	Children's Hospital
TSCHIFFELY, D., [171].....	475 Pennsylvania Avenue
TURNER, J. P., [176].....	918 O Street
VAN ORSTRAND, C. E., [37].....	1607 31st Street
VAN VLECK, W. C., [37].....	719 Quincy Street
VEDITZ, C. W. A., [33].....	3028 Newark Street
WAGGAMAN, S., [171].....	1403 31st Street
WALTON, J. R., [33].....	724 9th Street
WEAKLEY, A. D., [36].....	1339 K Street
WEBB, W. D., [37].....	U. S. A. Soldiers Home
WELLER, F. P., [171].....	753 8th Street S.E.
WELLINGTON, J. R., [33].....	1723 Connecticut Avenue
WHITE, C. S., [33].....	The Farragut
WHITE, W. A., [33].....	Government Hospital for Insane
WILBUR, W. A., [32].....	2307 S Street
WILEY, E., [36].....	Library of Congress
WILEY, H. W., [32].....	1848 Biltmore Street
WILKINSON, W. W., [35].....	The Rochambeau
WILLIAMS, H. S., [176].....	2113 14th Street
WOLFE, A. S., [34].....	728 13th Street
WOODHULL, M. Van Z., [28].....	2033 G Street
WOODWARD, M. R., [36].....	1832 Biltmore Street
WOODWARD, W. C., [33].....	1765 Lanier Place
WORTHINGTON, A. S., [28].....	416 5th Street
YARROW, H. C., [32].....	2116 Bancroft Place
YOUNG, H. C., [36].....	3104 N Street



# INDEX

- Academic year, 27.
- Acker Prize, 155.
- Administrative Officers, 30.
- Admission Requirements:
  - The Colleges, general statement, 49.
  - Examination Schedule, 50.
  - Definitions, 51.
  - Advanced standing, 59.
- Columbian College, 65.
- College of Engineering and Mechanic Arts, 71.
- Teachers College, 76.
- School of Graduate Studies, 46.
- Department of Law, 112.
- Department of Medicine, 132.
- Department of Dentistry, 158.
- National College of Pharmacy, 172.
- College of Veterinary Medicine, 177.
- Alumni Associations, 243.
- American Law Book Co. Prize, 123.
- Anatomy, 138, 160, 161, 179.
- Morbid, 142.
- Dental, 160.
- Comparative Dental, 164.
- Applied Mathematics, 91.
- Appointments, Terms of, 27.
- Archaeology, 79.
- Architecture, 80.
- Arts and Sciences, Department of, 43.
  - Faculty, 43.
  - School of Graduate Studies, 45.
  - The Colleges, 49.
  - Instruction, 79.
  - Fees, 64.
  - Students, 191.
- Art, History of, 79.
- Associated Colleges, 169.
  - Organization, 19, 25.
  - National College of Pharmacy, 171.
  - College of Veterinary Medicine, 176.
- Associations, Allied, 243.
  - Alumni, 243.
  - Columbian Women, 245.
  - Lady Managers of the Hospital, 245.
- Astro-Physics, 82.
- Auditor, 24.
- Auditors, 59, 114, 159.
- Bacteriology, 162, 182.
- Biological Science, 82.
- Botany, 83, 185.
- Bridge work, 164.
- Business organization, 88, 165.
- Butler Prize, 155.
- By-Laws, 20.
- Calendar, 1913-14, 7.
  - University, 8.
  - National College of Pharmacy, 172.
- Carter, Henry Harding, Scholarships, 60.
- Carter, Maria M., Scholarship, 60.
- Chapel, 64.
- Charter, 9.
- Chemistry, 83, 140, 160, 174, 180.
- Chi Omega Prizes, 63.
- Civil Engineering, 92.
- Classical Languages, 85.
- Colleges:
  - Organization, 25.
  - Of the Department of Arts and Sciences, 49.
  - Associated, 169.
- Colonial History Prize, 63.
- Columbian College, 65.
  - Faculty, 45.
  - Admission Requirements, 65.
  - Graduation Requirements, 66.
  - Combination Courses, 68.
  - Scholarships and prizes, 60.
  - Schedule of Required subjects, 70.
  - Consular Service, 71.
  - Fees, 64.
  - Students, 197.
- Columbian Women, 245.
  - Loan Fund, 61.
- Commencement, 38.
- Commercial Geography, 88.
- Committees: Of the Trustees, 29.
  - Of the President's Council, 31.
- Consular Service, 71.
- Corcoran Scholarships, 154.
- Council, President's, 26, 31.
- Counsel, 23.
- Crown Work, 164.
- Cutter, E. K., Prize, 62.
- Davis Prizes, 62.
- Davis Prize Speaking, 63.
- Davis Scholarship, 60.
- Daughters of the American Revolution Prizes, 62.
- Deans, 26.
- Debating, 123.
- Degrees, Requirements for:
  - A.B., 66.
  - B.S. in Chem., 68.
  - B.S. in C.E., 72.
  - B.S., in E.E., 72, 73.
  - B.S. in M.E., 72, 74.
  - B.S. in Med., 69, 133.
  - B.S. in Arch., 72, 75.
  - A.M., S.M., 46.
  - C.E., E.E., M.E., 46.
  - Ph.D., 47.
  - LL.B., 115.
  - LL.M., M.P.L., 118.
  - M.D., 154.
  - D.D.S., 166.
  - Phar.D., 173.
  - D.V.M., 186.
  - Combination courses, 68, 115, 133.
- Degrees Conferred, 249.
- Dental Infirmary, 165.
- Dentistry, Department of, 157.
  - Faculty, 157.
  - Clinical Staff, 165.
  - Infirmary, 165.
  - Admission Requirements, 158.
  - Graduation Requirements, 166.
  - Instruction, 159.
  - Fees, 167.
  - Students, 233.

**Departments:**

Organization, 25.  
 Arts and Sciences, 43.  
 Law, 110.  
 Medicine, 125.  
 Dentistry, 157.  
 Dermatology, 150.  
 Diagnosis, Physical, 145.  
 Dietetics, 141.  
 Diplomacy, 102.  
 Dispensary Staff, 128.  
 Doctorate Disputations, 49.  
 Drawing, 80.  
 Economics, 86.  
 Education, 88.  
 Electrical Engineering, 94.  
 Ellsworth Prize, 123.  
 Elton Prize, 62.  
 Embryology, 179.  
 Engineering and Mechanic Arts, College of, 71.

Faculty, 45.  
 Admission Requirements, 71.  
 Graduation Requirements, 72.  
 Scholarships and Prizes, 60.  
 Fees, 64.  
 Students, 197.  
 Engineering, 91.  
 Civil, 92.  
 Electrical, 94.  
 Mechanical, 96.  
 English, 90.

**Faculties:**

Organization, 25.  
 University Teaching Staff, 32.  
 Arts and Sciences, 43.  
 Graduate Studies, 45.  
 Columbian College, 45.  
 Engineering and Mechanic Arts, 45.  
 Teachers College, 45.  
 Law, 110.  
 Medicine, 125.  
 Dentistry, 157.  
 Pharmacy, 171.  
 Veterinary Medicine, 176.  
 Farnham Scholarship, 60.

**Fees:**

Arts and Sciences, 64.  
 Law, 124.  
 Medicine, 155.  
 Dental, 167.  
 Pharmacy, 175.  
 Veterinary Medicine, 187.  
 Finance, 87.  
 Fitch, W. E., Prize, 62.  
 French, 108.  
 Genito-Urinary Diseases, 147.  
 Geographical Distribution, 239.  
 Geography, Commercial, 88.  
 Geology, 98.  
 German, 99.  
 Gold Inlay, 164.  
 Governmental Privileges, 39.  
 Graduate Studies, School of, 45.  
 Faculty, 45.  
 Admission Requirements, 46.  
 Qualification for Degrees, 46.  
 Doctorate Disputations, 49.  
 Fees, 64.  
 Students, 191.  
 Graphics, 96.  
 Greek, 85.  
 Gunshot Wounds, 148.  
 Gynecology, 149.  
 Hagner Prize, 155.  
 Histology, 162, 179.  
 History, 101.

**Hospital:**

Staff, 127.  
 Appointments, 155.  
 Lady Managers of the, 245.  
 Hubbard, G. G., Memorial Prize, 62.  
 Hydraulics, 92.  
 Hygiene, 150.  
 Infirmary, Dental, 165.

**Instruction:**

Arts and Sciences, 79.  
 Law, 115.  
 Medicine, 136.  
 Dentistry, 159.  
 Pharmacy, 173.  
 Veterinary Medicine, 178.  
 International Law, 102.

**Jurisprudence:**

Medical, 151.  
 Dental, 164.  
 Pharmaceutical, 175.  
 Veterinary, 186.

Kendall Scholarship, 59.

Latin, 86.

Laryngology, 149.

Law, Department of, 110.

Faculty, 110.  
 Admission Requirements, 112.  
 Instruction, 114.  
 Degrees, 122.  
 Moot Court Work, 118.  
 Debating, 123.  
 Examination Regulations, 121.  
 Library, 122.  
 Prizes, 122.  
 Fees, 124.  
 Students, 217.  
 College Graduates, 230.

Law, International, 102.

Maritime, 87.

Patent, 118.

**Library:**

University, 38.  
 Law, 122.  
 Medical, 130.  
 Materia Medica, 141, 161, 173, 180.  
 Mathematics, 102.  
 Applied, 91.  
 Mechanical Engineering, 96.  
 Medicine, Department of, 125.  
 Faculty, 125.  
 Hospital Staff, 127.  
 Dispensary Staff, 128.  
 Admission Requirements, 132.  
 Premedical year, 133.  
 Instruction, 135.  
 Clinical Facilities, 151.  
 Examination Regulations, 153.  
 Graduation Requirements, 154.  
 Scholarships, 154.  
 Prizes, 155.  
 Fees, 155.  
 Students, 230.  
 Medicine, Subject, 143.  
 Preventive, 107.  
 Tropical, 144.  
 Veterinary, 181.  
 Metallurgy, 84, 164.  
 Meteorology, 103.  
 Microscopy, 175.  
 Milk Hygiene, 183.  
 Mineralogy, 98.  
 Ministerial Aid, 61.  
 Moot Court, 118.  
 Morehouse Scholarship, 60.  
 Muth Prize, 63.  
 Nautical Science, 104.  
 Neurology, Clinical, 144.

- Obstetrics, 148.
- Veterinary, 184.
- Officers:
  - Trustee, 29.
  - Administrative, 30.
- Operative Dentistry, 160.
- Operative Technics, 163.
- Ophthalmology, 150.
- Oral Prophylaxis, 165.
- Ordinance, 25.
- Ordronaux Prize Scholarship, 122, 155.
- Organization:
  - University, 38.
  - Departments, Colleges and Schools, 25.
  - Faculties, 25.
  - President's Council, 26.
- Ornithology, 83.
- Orthodontia, 159.
- Orthopedics, 147.
- Otology, 149.
- Paleontology, 99.
- Parasitology, Veterinary, 184.
- Patent Law, 118.
- Pathology, 142, 160, 162.
- Surgical, 147.
- Pediatrics, 145.
- Pharmacy, National College of, 171.
  - Trustees, 171.
  - Faculty, 171.
  - Calendar, 172.
  - Admission Requirements, 172.
  - Qualifications for Degree, 173.
  - Instruction, 173.
  - Fees, 175.
  - Students, 235.
- Pharmacy, Mercantile, 175.
- Philosophy, 104.
- Physics, 105.
- Phi Delta Phi Prize, 123.
- Physical Diagnosis, 145.
- Physiology, 139, 160, 180.
- Political Sciences, College of the,
  - Students, 197.
- Political Science, 106.
- Porcelain, 164.
- Powell, Admiral, Scholarship, 60.
- President, 20.
- President's Council, 26.
  - Members, 31.
  - Committees, 31.
- Preventive Medicine, 107.
- Prizes:
  - Arts and Sciences, 62.
  - Law, 122.
  - Medicine, 155.
- Prophylaxis, Oral, 165.
- Prosthetic Dentistry, 159.
  - Technics, 163.
- Psychiatry, 144.
- Psychology, 104.
- Religious Work, 64.
- Romance Languages, 108.
- Ruggles Prizes, 62.
- Scholarships:
  - Arts and Sciences, 59.
  - Medicine, 154.
- Schools:
  - Organization, 25.
  - Graduate Studies, 45.
- Secretary, 22.
- Sociology, 86.
- Spanish, 109.
- Special Students, 59, 114, 135.
- Staughton Prize, 62.
- Sterrett, J. M., Jr., Prize, 63.
- Stone, Mary Lowell, Scholarship, 60.
- Students, List of:
  - Graduate Studies, 191.
  - The Colleges, 197.
  - Law, 217.
  - Medicine, 230.
  - Dentistry, 233.
  - Pharmacy, 235.
  - Veterinary Medicine, 237.
- Summaries:
  - General, 240.
  - Arts and Sciences, 216.
  - Law, 229.
  - Medicine, 233.
  - Dentistry, 235.
  - Pharmacy, 237.
  - Veterinary Medicine, 238.
- Surgery, 145.
  - Oral, 161.
  - Veterinary, 181.
- Surgical Pathology, 147.
- Teachers Appointment Bureau, 78.
- Teachers College, 76.
  - Faculty, 45.
  - Admission Requirements, 76.
  - Graduation Requirements, 77.
  - Teacher's Diploma, 78.
  - Appointment Bureau, 78.
  - Scholarships and Prizes, 60.
  - Fees, 64.
  - Students, 197.
- Teacher's Diploma, 78.
- Technics, 163.
- Therapeutics, 141, 161, 180.
- Toxicology, 173.
- Treasurer, 22.
- Tropical Medicine, 144.
- Trustees, University Board of:
  - Members, 28.
  - Alumni Membership, 19.
  - Officers, 29.
  - Committees, 29.
  - By-Laws, 20.
- Trustees:
  - Pharmacy, 171.
  - Veterinary, 176.
- University Aid, 61.
- University Scholarships, 59.
- Veterinary Medicine, College of, 176.
  - Trustees, 176.
  - Faculty, 176.
  - Admission Requirements, 177.
  - Graduation Requirements, 186.
  - Instruction, 178.
  - Fees, 187.
  - Students, 237.
- Walsh, T. F., Prize, 62.
- Walker Scholarship, 60.
- Withdrawals, 65, 124, 156, 168.
- Withington Scholarship, 60.
- Zoology, 82, 184.





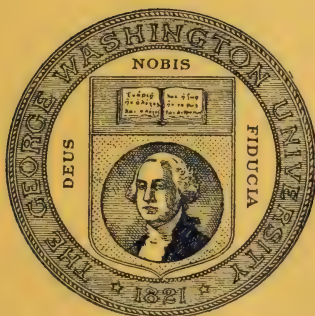




# The George Washington University Bulletin

CATALOGUE NUMBER

MARCH 1914



PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C., MARCH,  
JUNE, OCTOBER, AND DECEMBER

---

Entered October 6th, 1904, at Washington, D. C., as second-class  
matter under Act of Congress of July 16th, 1894





THE  
GEORGE WASHINGTON UNIVERSITY  
BULLETIN

CATALOGUE NUMBER

MARCH 1914

BALTIMORE  
WILLIAMS & WILKINS CO.  
1914



# CONTENTS

PART I. GENERAL AND HISTORICAL:	PAGE
Calendar.....	8
Legal History (Charter).....	9-19
By-Laws.....	20-24
Ordinance.....	25-27
Trustees.....	28-29
Administrative Officers.....	30
President's Council.....	31
Teaching Staff.....	32-38
Organization.....	38
Library.....	38-39
 PART II. DEPARTMENTS OF THE UNIVERSITY:	
Department of Arts and Sciences.....	43-118
The School of Graduate Studies.....	46-50
The Colleges.....	51-85
Columbian College.....	68-77
The College of Engineering.....	78-82
Teachers College.....	83-85
Courses of Instruction.....	86-118
Professional Departments:	
Law School.....	119-133
Medical School.....	134-164
Dental School.....	165-176
 PART III. THE ASSOCIATED COLLEGES:	
National College of Pharmacy.....	179-183
College of Veterinary Medicine.....	184-196
 PART IV. STUDENTS:	
Department of Arts and Sciences.....	199-230
School of Graduate Studies.....	199-205
The Colleges.....	205-230
Law School.....	230-243
College Graduates Candidates for Degrees.....	244
Medical School.....	245-249
Dental School.....	249-251
National College of Pharmacy.....	251-253
College of Veterinary Medicine.....	253-254
Geographical Distribution.....	255

## MISCELLANEOUS:

General Summary.....	256
Degrees Conferred 1912-13.....	257-264
Allied Associations.....	265-267
Directory.....	269-275
Index.....	277-279



**PART I**  
**GENERAL AND HISTORICAL**



1914							1915						
JULY							JANUARY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	1	2	3	4	..	..	..	..	..	1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30	31	..	24	25	26	27	28	29	30
..	..	..	..	..	..	..	31	..	..	..	..	..	..
AUGUST							FEBRUARY						
..	..	..	..	..	..	1	..	1	2	3	4	5	6
2	3	4	5	6	7	8	7	8	9	10	11	12	13
9	10	11	12	13	14	15	14	15	16	17	18	19	20
16	17	18	19	20	21	22	21	22	23	24	25	26	27
23	24	25	26	27	28	29	28	..	..	..	..	..	..
30	31	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							MARCH						
..	..	1	2	3	4	5	..	1	2	3	4	5	6
6	7	8	9	10	11	12	7	8	9	10	11	12	13
13	14	15	16	17	18	19	14	15	16	17	18	19	20
20	21	22	23	24	25	26	21	22	23	24	25	26	27
27	28	29	30	..	..	..	28	29	30	31	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
OCTOBER							APRIL						
..	..	..	..	1	2	3	..	..	..	1	2	3	..
4	5	6	7	8	9	10	4	5	6	7	8	9	10
11	12	13	14	15	16	17	11	12	13	14	15	16	17
18	19	20	21	22	23	24	18	19	20	21	22	23	24
25	26	27	28	29	30	31	25	26	27	28	29	30	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
NOVEMBER							MAY						
1	2	3	4	5	6	7	..	..	..	..	..	1	..
8	9	10	11	12	13	14	2	3	4	5	6	7	8
15	16	17	18	19	20	21	9	10	11	12	13	14	15
22	23	24	25	26	27	28	16	17	18	19	20	21	22
29	30	..	..	..	..	..	23	24	25	26	27	28	29
..	..	..	..	..	..	..	30	31	..	..	..	..	..
DECEMBER							JUNE						
..	..	1	2	3	4	5	..	..	1	2	3	4	5
6	7	8	9	10	11	12	6	7	8	9	10	11	12
13	14	15	16	17	18	19	13	14	15	16	17	18	19
20	21	22	23	24	25	26	20	21	22	23	24	25	26
27	28	29	30	31	..	..	27	28	29	30	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
JULY							AUGUST						
S	M	T	W	T	F	S	1	2	3	4	5	6	7
..	..	..	..	1	2	3	8	9	10	11	12	13	14
4	5	6	7	8	9	10	15	16	17	18	19	20	21
11	12	13	14	15	16	17	22	23	24	25	26	27	28
18	19	20	21	22	23	24	29	30	31	..	..	..	..
25	26	27	28	29	30	31	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							OCTOBER						
..	..	..	1	2	3	4	..	..	..	..	1	2	..
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30	..	..	24	25	26	27	28	29	30
..	..	..	..	..	..	..	31	..	..	..	..	..	..
NOVEMBER							DECEMBER						
..	1	2	3	4	5	6	..	..	1	2	3	4	..
7	8	9	10	11	12	13	5	6	7	8	9	10	11
14	15	16	17	18	19	20	12	13	14	15	16	17	18
21	22	23	24	25	26	27	19	20	21	22	23	24	25
28	29	30	..	..	..	..	26	27	28	29	30	31	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..

# UNIVERSITY CALENDAR

1914

June 10 *Wednesday*.—University Commencement.

## SUMMER VACATION

September 30 *Wednesday*.—Academic Year begins in all Departments of the University.  
 October 14 *Wednesday*.—Stated meeting of the Board of Trustees.  
 November 26–28 *Thursday to Saturday*, both inclusive.—Thanksgiving recess.

## RECESS FROM DECEMBER 24, 1914, TO JANUARY 3, 1915, BOTH INCLUSIVE

1915

January 13 *Wednesday*.—Stated meeting of the Board of Trustees.  
 January 25 *Monday*.—Last day on which theses may be presented.  
 February 1 *Monday*.—Second Term begins.  
 February 8 *Monday*.—Doctorate Disputation.  
 February 22 *Monday*.—A holiday in all Departments of the University. Winter Convocation.  
 April 2–5 *Friday to Monday*, both inclusive.—Easter holidays.  
 April 6 *Tuesday*.—Davis Prize Speaking.  
 May 1 *Saturday*.—Last day on which theses may be presented.  
 May 17 *Monday*.—Doctorate Disputation.  
 May 24–27 *Monday to Thursday*.—Examinations for admission.  
 May 31 *Monday*.—A holiday in all Departments of the University.  
 June 2 *Wednesday*.—Annual meeting of the Board of Trustees.  
 June 6 *Sunday*.—Baccalaureate Sermon.  
 June 9 *Wednesday*.—University Commencement.



## THE LEGAL HISTORY OF THE CORPORATION

The George Washington University is the successor of the "Columbian College in the District of Columbia," which was chartered by Act of Congress in 1821. The name and title of the Columbian College were in 1873 changed by an Act of Congress, under the terms of which the College was given the name of the "Columbian University." The Columbian University was by Act of Congress in 1904 authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education. The Board of Trustees elected to take the name of "The George Washington University," and the name was approved by the government officials, as required by the statute; the change of name going into effect September 1, 1904. All the Acts of Congress now in force relative to the Columbian College and the Columbian University are therefore parts of the charter of The George Washington University.

The original charter of the Columbian College was as follows:

### **An Act to incorporate the Columbian College, in the District of Columbia**

*Be it enacted, &c.,* That there be erected, and hereby is erected and established, in the District of Columbia, a College, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, the "Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted,* That the said College shall be under the management, direction, and government of a number of Trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said College, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the College, on the first Monday in May; and that the first Trustees of the said College shall consist of the following persons, viz: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw: which said Trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style and title of the "Columbian College in the District of Columbia;" by which name and title, they, the said Trustees, and, their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said College, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided,* The same do not exceed, in the whole, the yearly

value of twenty-five thousand dollars; and the same messuages, lands, tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm, let, and place out on interest, for the use of the said College, in such manner as to them, or at least nine of them, shall seem most beneficial to the institution, and to receive the rents, issues, and profits, income and interest, of the same, and to apply the same to the proper use and benefit of the said College; and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted*, That the said Trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the said College, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted*, That the said Trustees, or five of them at least, shall meet at the College, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this Act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said Trustees held twice in every year at least, at such place and time as the said Trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the President, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if, at such stated or occasional meetings, five of the said Trustees shall not be present, those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually, to all intents and purposes, as if the whole number of Trustees for the time being were present; but, if five or more of the said Trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said Trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said College not otherwise provided for by this Act; and particularly of making and enacting ordinances for the government of the said College; of electing and appointing the President, Professors, and Tutors, for the said College; of agreeing with them for their salaries and stipends, and removing them for misconduct, or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the Board; of appointing a President, Treasurer, Secretary, stewards, managers, and other necessary and customary officers, for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said Trustees, consisting of five persons at least, at any semi-annual, occasional, or adjourned meeting, after notice, given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise, and be incidentally necessary to be determined and transacted by the said Trustees *Provided always*, That no ordinances shall be of force which shall be repugnant to this charter, or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted*, That the head or Chief Master for the said College shall be called and styled the "President," and the Masters thereof shall be called "Professors and Tutors;" but neither President, Professors, or Tutors, while they remain such, shall ever be capable of the office of Trustee.

SEC. 6. *And be it further enacted*, That the President, Professors and Tutors, or a majority of them, shall be called and styled the "Faculty of the College," which Faculty shall have the power of enforcing the rules and regulations adopted by the Trustees for the government of the pupils, by rewarding or censuring them, and finally, by suspending such of them who as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the Trustees can be had; and of granting and confirming, by and with the approbation and consent of a board of the Trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution or others, who, by their proficiency in learning, or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant to such graduates, diplomas or certificates, under their common seal, and signed by the Faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted*, That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted*, That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest, to or from the said corporation: *Provided*, The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted*, That the constitution of the said College, herein and hereby declared and established, shall be, and remain, the inviolate constitution of the said College forever; and the same shall not be altered or alterable by any ordinance or law of the said Trustees: *Provided*, That it may be lawful for the Congress of the United States to revoke and repeal this Act, at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted*, That it shall be the duty of the said Board of Trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations, which may be adopted by the said Board, for their own government, and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said Trustees, for the use of the said College, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said Trustees, to cause to be enrolled, in the said book or journal, the names of all the contributors to the institution qualified to vote for Trustees, with their respective places of residence; and the said book or journal shall, at all times be open to the inspection or examination of the Attorney General of the United States; and, when required by either House of Congress, it shall be the duty of said Trustees to furnish information respecting their own conduct, the state of the institution, and of its finances, which shall or may be so required.

SEC. 11. *And be it further enacted*, That in case any vacancy or vacan-



cies shall happen in the Board of Trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other Trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted*, That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this Act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this Act, and the same shall, thenceforth, cease and become null and void.

Approved, February 9, 1821.

By Act of Congress of July 14, 1832, there were donated to the Columbian College Washington city lots to the value of twenty-five thousand dollars; the Act providing that the fund arising from the proceeds of the sale of the lots should constitute an endowment fund for the support of professorships. By Act of February 28, 1839, permission was granted to the College to use seven thousand dollars of the fund for the payment of its debts.

By Act of Congress of February 21, 1871, a form of government by an elected Governor and Legislative Assembly was established for the District of Columbia, and on July 25, 1871, the Legislative Assembly passed the following statute:

**An Act for the relief of the Columbian College, in the District of Columbia**

*Be it enacted by the Legislative Assembly of the District of Columbia*, That the Columbian College, in the District of Columbia, chartered by and organized and acting under the Act of Congress approved February nine, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted*, That the Trustees of said College elected in May last shall constitute the corporation of said College until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted*, That the said Trustees shall meet in the Law Building of said College at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing, and shall then and there, or at the time and place to which said meeting may be adjourned, elect thirteen Trustees and thirteen Overseers, who shall, upon their election, constitute the College corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted*, That the Trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of Trustees and Over-



seers to be thereafter held in said City of Washington on the Tuesday next preceding the last Wednesday in June, annually, the Trustees and Overseers in convention assembled shall fill vacancies in their Board, and shall, by ballot, elect from among the Trustees two suitable persons, one to be President and the other to be Treasurer and Secretary of said corporation and of the Board of Trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the College Faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and President, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted*, That at said annual meetings not less than seven Trustees and three Overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any number present: *Provided*, That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted*, That during the interval between said annual meeting the Trustees shall, as now, hold semi-annual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the Faculty or in their own Board, and with all their present powers as modified by this Act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the Trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

This Act of the Legislative Assembly of the District was confirmed by Congress in 1873, and by the same statute the College was given the name of "the Columbian University." This Act was as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College in the District of Columbia**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known and called by the name of the Columbia[n] University, and in that name shall take, hold and manage all the estate and property now belonging to said College, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction of the yearly value of the property of the said corporation to the sum of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its Overseers to twenty-one, and the number of its Trustees to twenty-one, exclusive of the President of the Faculty, who shall be, *ex officio*, a Trustee of said corporation.

SEC. 2. That the Act for the Relief of the Columbian College in the District of Columbia enacted by the Legislative Assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That this Act nor the said Act of the Legislative Assembly of the said District, shall be so construed as to authorize the said Columbian University to sell, or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the Act

of Incorporation and the Act granting any such land or real estate, or contrary to any will, devise or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

Approved, March 3, 1873.

By the Act of Congress of May 31, 1878, it was provided that the annual meeting of the corporation might be held either in May or June, and by the Act of January 14, 1893, it was provided that the Secretary and the Treasurer might be elected from the Trustees or not, as the Board of Trustees might deem proper, and that it should not be necessary that both offices should be held by one person.

In 1898 Congress amended the charter by an Act as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and control of a Board of Trustees, consisting of twenty-two members; the President of the University shall be *ex officio* a member of said Board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said Board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the Trustees and Overseers of said University shall be held, and said meeting shall elect twenty-one Trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said Trustees so elected shall serve for the periods mentioned and until their successors are elected. That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present Trustees and Overseers shall cease and determine and thereupon the control and management of said University, its property and trusts, shall vest in the Board of Trustees elected as hereinabove provided and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the Board of Trustees seven Trustees to fill the places of the class whose terms of office expire; and the Board of Trustees may prescribe in a by-law the mode of nominating persons for election as Trustees. A failure to elect Trustees at the annual meeting shall not create vacancies in the Board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the Board at any general or special meeting.

SEC. 3. That the Board of Trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents,

and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the Trustees constituting said Board, adopt and change by-laws for the conduct of the business and educational work of said University; they may appoint an Executive Committee composed of Trustees, designate the number and Chairman thereof, with such powers and authority as are usually exercised by an Executive Committee, and which shall be conferred by the Board, subject always to the control of the Board of Trustees; they may create and establish schools and departments of learning to be connected with and become a part of said University; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said University, and by any department and chair thereof now established or which may hereafter be created or established by said University; and they shall have all the powers and authority heretofore granted to and vested in the Trustees and Overseers of said University.

SEC. 4. That the annual meeting of the Board of Trustees shall be held in the City of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the President of the University or by the Executive Committee or by seven members of the Board of Trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the Trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those Trustees not present.

SEC. 5. That the terms of office of the President of the University, the Treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the University shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the Board of Trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this Act are hereby repealed.

Approved, March 18, 1898.

In 1904 Congress passed an Act restoring the non-denominational character of the institution and permitting the change of its name. This Act and the certificate of change of name were as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory Act approved March eighteenth, eighteen hundred and ninety-eight, be and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory Act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said Trustees, and also the*



President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, re-enacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the Board of Trustees of said University to change the name of said University at any regular meeting by a vote of not less than two-thirds of the total number of members of the Board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the University, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the Recorder of Deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory Acts thereto.

SEC. 4. That all Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved, January 23, 1904.

**Certificate of Change of Name of the Columbian University to "The George Washington University"**

**DISTRICT OF COLUMBIA,  
City of Washington:**

The Columbian University, in accordance with the Act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its Board of Trustees, duly held on the eighth day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the Board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said Act of Congress, the name of this University be changed to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904.

And it is hereby further certified, that on the twentieth day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its



certificate under its corporate seal, at the City of Washington, D. C., on the twenty-first day of June, A. D. 1904.

CHARLES W. NEEDHAM,  
*President.*

Attest:

JOHN B. LARNER,  
*Secretary.*  
(Corporate Seal.)

UNITED STATES OF AMERICA,  
DEPARTMENT OF THE INTERIOR,  
WASHINGTON, D. C., *June 20, 1904.*

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the Department.

In testimony whereof, I have hereunto subscribed my name, and caused the seal of the Department of the Interior to be affixed, the day and year first above written.

E. A. HITCHCOCK,  
*Secretary of the Interior,*  
W. B. A.

(Seal of the Department of the Interior.)

Whereas by Act of Congress approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education;

And whereas it has been made satisfactorily to appear to us that, at the regular meeting of the Board of Trustees of said University, held on the eighth day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said Board, it was unanimously resolved to change the name of said University to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904;

Now, therefore, this is to witness that, pursuant to said Act of Congress, we do hereby, this twentieth day of June, A. D. 1904, approve said change of name.

E. A. HITCHCOCK,  
*Secretary of the Interior.*  
W. T. HARRIS,  
*Commissioner of Education.*

(Seal of the Department of the Interior.)

In 1905 a further amendment to the charter was made, as follows:

**An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof**

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time, by a two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of Trustees a certificate, stating the number of the Board and the time when it shall go into effect and that the action so taken was by two-thirds vote as required by this Act, shall be filed with the Recorder of Deeds of the District of Columbia, and upon and after the date named the Board shall consist of the number of Trustees, stated in such certificate, and said

Board may also appoint a Board or Boards of Visitors for any department or departments of educational work carried on by the University, such Boards of Visitors to be advisory only.

SEC. 2. That by and with the consent of said University, Colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such Colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a College hereunder, may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: First, the intention to organize a corporation under this Act and the assent of the University thereto; second, the name or title by which the College shall be known in law; third, the names of the Trustees constituting the first Board, and such Trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said Trustees; fifth, the branch or branches of literature, arts, sciences, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said College shall be a Dean, the Dean and members of the Faculty to be members of the Educational Councils of the University in accordance with the rules governing the University; seventh, that all degrees shall be bestowed by the University; eighth, that in all financial and legal responsibility the College shall be an independent organization. Upon filing such certificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the College to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the University regulating the conduct of educational work, as may be deemed necessary for the government of the College, but said College shall not confer academic or honorary degrees; such College shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequests solely for the purposes of the educational work specified in said certificate; the Trustees of such College shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the College.

SEC. 3. That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University and the Departments of the Government in the City of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions.

Approved, March 3, 1905.

Under section 2 of the Act of 1905, there now exist two colleges which are doing special educational work and which are in active operation—the National College of Pharmacy, organized in 1905, and the College of Veterinary Medicine, organized in 1908. The financial affairs of these Colleges are separate from those of the University, and are managed by their separate Boards of Trustees. The Faculties of these Colleges are also appointed by their respective Boards of Trustees. The connection between these Colleges and the University consists in the fact that their Deans are members of the President's Council, and that the Board of Trustees of the University confers degrees for the work done in these Colleges.

By resolutions of the Board of Trustees of the University of May 6, 1909, and January 12, 1910, provision was made for the nomination by the Alumni of two Alumni Trustees each year. In the spring of 1910, this plan was put in operation, and since then the two persons annually nominated as Alumni Trustees have been elected to membership on the Board.

# BY-LAWS OF THE GEORGE WASHINGTON UNIVERSITY

## ARTICLE I

### *The President of the University*

SECTION 1. The President of the University shall hold office without limit of time, until his resignation be accepted, or he be removed from office by the Board of Trustees; he shall be the executive head of the University and of all its departments, exercising such supervision, direction, and control as will promote the efficiency of every department; he shall be responsible, under the supervision of the Board of Trustees, for the discipline of the University; he shall preside at the meetings of the Faculties, and be the official medium of communication between the Faculties and the Board of Trustees, and between the students of the University and the Board of Trustees; he shall recommend to the Board of Trustees appointments to the several Faculties; he shall be responsible for carrying out such measures concerning the internal administration of the University as the Board of Trustees may enact. He shall make a yearly report to the Board of Trustees at the January meeting concerning the state of the University. He shall control the expenditure and administration of the yearly budget when formally adopted by the Board of Trustees.

## ARTICLE II

### *Board of Trustees*

SECTION 1. No member of the teaching staff of the University except the President of the University, or of the teaching staff of any college incorporated under the charter of the University, while he remains such, shall be capable of holding the office of Trustee of the University.

SEC. 2. At the annual meeting of the Board after the election of Trustees, the Board shall elect by ballot from among their number a Chairman and Vice-Chairman of the Board to serve until the next annual meeting and until their successors are elected and qualified. The Chairman of the Board, and in his absence the Vice-Chairman, shall preside at all meetings of the Board of Trustees.

SEC. 3. At the annual meeting after the election of Trustees the Board shall elect by ballot the following officers, to serve until the next annual meeting and until their successors are elected and qualified: a Secretary, a Treasurer, an Auditor, and a Counsel of the University.

SEC. 4. In the event of a failure for any reason so to elect either or



all of the said officers, or in case of any vacancy from any cause, then an election may be held for the unexpired term at a meeting called for that purpose.

SEC. 5. The annual meeting of the Board of Trustees shall take place on the Wednesday nearest the first day of June of each year.

SEC. 6. Stated meetings of the Board shall be held on the second Wednesdays of October and January.

SEC. 7. Notice of all stated meetings shall be mailed by the Secretary of the University to each member of the Board at least five days previous to the time of such meetings.

SEC. 8. Special meetings may be called at any time by the President of the University, the Executive Committee, or by seven members of the Board of Trustees. The Secretary shall issue the notices of such meetings.

SEC. 9. The call for special meetings shall state the nature of the business to be considered, and shall be mailed at least two days before the meeting is to be held.

SEC. 10. Seven members of the Board of Trustees shall constitute a quorum for the transaction of any business.

### ARTICLE III

#### *Executive Committee*

SECTION 1. There shall be an Executive Committee of seven members of the Board of Trustees, of which the President of the University shall be Chairman *ex officio*. The other members of the committee shall be elected by ballot at the annual meeting, and shall serve until their successors are elected.

SEC. 2. In case of inability to act on the part of any member of the Committee his place may be filled by the Board of Trustees.

SEC. 3. Four members of the Committee shall constitute a quorum for the transaction of business.

SEC. 4. The Committee is authorized to transact such business as may require attention between the regular meetings of the Board of Trustees; but the Chairman of the Committee shall make report at each stated meeting of the Board on the proceedings of the Committee during the intervening period, and at any meeting of the Board, if any member of the Board shall request that the report of the proceedings of any meeting or meetings of the Committee be read, the same shall be read by the Secretary.

SEC. 5. Regular meetings of the Committee shall be held during the academic year monthly, and special meetings may be called by the Secretary whenever requested by the Chairman or any two members of the Committee.

SEC. 6. In case of inability to act on the part of the Chairman of the Committee, the Committee may appoint a temporary chairman for the meeting.

## ARTICLE IV

*Finance Committee*

SECTION 1. There shall be a Finance Committee of three members of the Board of Trustees who shall be elected at the annual meeting to serve until their successors are elected.

SEC. 2. The Committee shall invest and reinvest University funds, and shall exercise general supervision over the Treasurer's office, making report at every regular meeting of the Board of Trustees.

## ARTICLE V

*Visiting Committees*

SECTION 1. At the annual meetings there shall be appointed a Committee of three members for each school or department of the University, who shall visit and inspect the condition and conduct of the school or department and make a written report thereon to the stated meetings of the Board of Trustees.

## ARTICLE VI

*The Secretary of the University*

SECTION 1. The Secretary of the University shall as such attend and keep minutes of all meetings of the Board of Trustees, the Executive Committee, the educational council and faculties, as may by resolution of the Board be required to keep records. He shall give to any meeting at which he is entitled to be present any information concerning University affairs which he may have and which may be proper to be brought before such meeting. He shall have the custody of all the files and records of the University proper to his office; he shall have the custody of the corporate seal of the University, and shall affix it to corporate acts authorized by the Board of Trustees or the Executive Committee, and he shall generally do and perform such administrative duties as may be assigned him by the President from time to time not inconsistent with the by-laws.

## ARTICLE VII

*The Treasurer of the University*

SECTION 1. The Treasurer shall give bond or shall be bonded in a surety company, at the expense of the University, for the faithful performance of his duties in such sum and with such sureties as shall be approved by the Board of Trustees.

SEC. 2. He shall keep all the funds of the University in such bank or banks as the Board of Trustees shall designate; he shall keep the trust funds, and the full account thereof, separate from the current or general funds and accounts of the University; he shall make monthly statements, showing the current financial operations and the condition of the trust funds and other invested funds to the Executive Committee; he shall

make a full report annually to the Board of Trustees as specified in Article XI, and he shall at such other times make such reports as the Trustees may require.

SEC. 3. He shall make payments only by checks upon the bank countersigned by the President of the University, or in his absence by the Secretary, and only for investments, salaries, bills, and expenses authorized by the Board of Trustees or the Executive Committee, provided, however, that when the Treasurer is absent or incapacitated, or when the office of Treasurer is vacant, or when the President and Secretary are both absent or incapacitated, or in any other emergency, the Executive Committee may by resolution make special and temporary arrangements for the signing or countersigning of checks.

### ARTICLE VIII

#### *The Auditor of the University*

SECTION 1. The Auditor of the University shall make three audits each year of the books and accounts of the Treasurer. The fiscal year shall end at midnight on August 31 of each year, and the accounts shall be audited as of December 31, April 30, and August 31 at midnight.

SEC. 2. A corporation may be elected by the Board of Trustees as the Auditor of the University.

### ARTICLE IX

#### *The Counsel of the University*

SECTION 1. The Counsel of the University shall render opinions to the President, the Board of Trustees, or to the Executive Committee, when requested, upon legal questions arising in the management of the educational or business affairs of the University, and shall represent the University in all legal proceedings prosecuted by or against the University. The Counsel of the University may be a member of the Board of Trustees.

### ARTICLE X

#### *Committee on Catalogue*

SECTION 1. Each year the annual catalogue of the University shall be prepared by a committee consisting of the President of the University as Chairman, the Secretary of the University, and three members of the Faculty of the University appointed by the President. The Catalogue shall be published annually in pamphlet form. Each annual catalogue shall contain the charter and by-laws of the University.

### ARTICLE XI

#### *Annual Financial Report*

SECTION 1. Between July 1 and October 1 in each year there shall be prepared by the Treasurer a financial report showing in detail the

financial condition of the University during the previous year, which financial report shall be certified by the Auditor to be correct. This report shall be laid before the Board of Trustees at their October meeting, and when approved by the Board of Trustees shall, with any modifications ordered by them and assented to by the Treasurer and Auditor, be printed by the University in pamphlet form.

## ARTICLE XII

### *Sale of Land and Other Assets*

SECTION 1. Real estate and other securities of the University shall not be sold or disposed of except by direction of the Board of Trustees.

SEC. 2. All deeds and conveyances of real estate belonging to the University shall be signed by the President of the University and the Secretary, and the same shall be acknowledged, attested, and the seal of the University attached thereto by the Secretary.

## ARTICLE XIII

### *Amendments*

SECTION 1. These by-laws may be amended or repealed at any meeting of the Board by a vote of the majority of all members of the Board, provided notice of the proposed amendment or change has been sent to each member of the Board at least five days before the meeting.

## ARTICLE XIV

### *Former By-Laws Repealed*

SECTION 1. All by-laws heretofore enacted are hereby repealed.



# ORDINANCE

## ARTICLE I

### *Organization*

SECTION 1. The departments, colleges, and schools forming an integral part of the University are as follows: The Department of Arts and Sciences, comprehending the School of Graduate Studies, Columbian College, the College of Engineering, the Teachers College; the Law School; the Medical School; the Dental School. These departments, colleges, and schools are subject to the Board of Trustees represented by the President of the University, and unless otherwise noted, to the rules and regulations herein set forth.

SEC. 2. Associated colleges organized in accordance with the charter of the University on independent financial foundations are under the immediate control of their respective Boards of Trustees, subject in educational matters to the authority of the President and the University Board of Trustees. The National College of Pharmacy and the College of Veterinary Medicine are such associated colleges.

SEC. 3. The Medical School including the University Hospital, and the Dental School are organized under special ordinances of the Board of Trustees, and are subject to the rules and regulations of this ordinance only where the special ordinances governing them do not conflict with this ordinance.

## ARTICLE II

### *Faculties*

SECTION 1. Each department, college, and school shall be under the immediate charge of a faculty subject to the authority of the President's Council. The faculties shall recommend to the Board of Trustees candidates for degrees, diplomas, certificates, and awards.

SEC. 2. Each faculty shall be composed of all the Professors, Assistant Professors, and Instructors who teach in the department, school, or college under the charge of that faculty, and of such other members as the faculty may, on the recommendation of the Dean, with the approval of the President, admit to membership. The President shall be *ex officio* a member of each faculty, and the Secretary shall *ex officio* have voice at all faculty meetings, but no vote.

SEC. 3. A faculty may, at its discretion, delegate any of its purely administrative powers to an executive committee of which a Dean shall be Chairman, the members of which shall be nominated by that Dean and appointed by the President. Every executive committee shall be subject to the authority of the faculty from which it is appointed.

### ARTICLE III

#### *President's Council*

SECTION 1. The President's Council shall have charge of all administrative educational questions, subject to the confirmation of the Board of Trustees.

SEC. 2. The President's Council shall be responsible for the coördination of work throughout the University and shall have immediate jurisdiction over every administrative educational question touching the interests of more than one department, college, or school.

SEC. 3. The President's Council shall be composed of the President of the University, the Secretary of the University, and of all the Deans in the University, *ex officio*, and of a representative or representatives from each department, college, and school of the University to be elected annually by the faculties of the respective departments, colleges, and schools; those departments, colleges, and schools with a registration of less than two hundred students having one representative, those with more than two hundred students having two representatives.

### ARTICLE IV

#### *Deans*

SECTION 1. The Dean of each department, college, or school shall be appointed by the Board of Trustees from among the members of its faculty. The Dean shall, under the President, be the chief executive officer of his department, college, or school. As such he shall have authority in his department, college, or school to enforce such regulations as may be imposed by the Board of Trustees or the Faculty. He shall be held responsible for the proper preparation and conduct of the business of his department, college, or school, and for the performance of such administrative duties as pertain to his office and may be required of him by the President. He shall make annual written reports to the President.

### ARTICLE V

#### *Titles of the Teaching Staff*

SECTION 1. The academic titles of those engaged in teaching shall be Professor, Assistant Professor, Instructor, Assistant, Demonstrator, and Lecturer. The word "Associate" may be prefixed to any title where, under the terms of this ordinance, it is appropriate, and in the Medical School this title may be used as provided in the special ordinances governing that department.

## ARTICLE VI

*Appointments*

SECTION 1. Instructors, Assistants, Demonstrators, and Lecturers shall, in the absence of agreement to the contrary, be appointed annually, with such compensation as shall be fixed by the Board of Trustees at the time of the appointment.

SEC. 2. Assistant Professors shall not be appointed for more than three years, subject to removal in accordance with the provisions of the charter of the University, and shall serve as Assistant Professors for at least three years before being eligible for promotion to a professorship.

SEC. 3. Professors shall be appointed without limit of time, subject to removal in accordance with the provisions of the charter of the University.

## ARTICLE VII

*Academic Year*

SECTION 1. The academic year shall begin on the last Wednesday of September, and shall end on the Wednesday following the annual meeting of the Board of Trustees.

## THE BOARD OF TRUSTEES

CHARLES HERBERT STOCKTON, LL.D.

*President of the University*

1914

CHARLES BERGER CAMPBELL, Phar.D., M.D., 1731 Lamont Street

\*HARRY CASSELL DAVIS, A.M., L.H.D., 1006 Massachusetts Avenue

WILLIAM JAMES FLATHER, Riggs National Bank

\*JOHN BELL LARNER, LL.B., LL.D., 900 F Street

HENRY BROWN FLOYD MACFARLAND, 1420 New York Avenue

WILLIAM HENRY SINGLETON, A.B., 2020 H Street

HENRY WHITE, LL.D., 1624 Crescent Place

1915

ABRAM LISNER, 1723 Massachusetts Avenue

WILLIAM ANDREW MEARNES, LL.M., 2301 S Street

\*THEODORE WILLIAMS NOYES, A.M., LL.M.,

1101 Pennsylvania Avenue

HENRY CLEVELAND PERKINS, 1701 Connecticut Avenue

\*ALEXANDER TAIT STUART, A.M., The Wyoming

MAXWELL VAN ZANDT WOODHULL, A.M., 2033 G Street

1916

HENRY GUSTAV BEYER, M.D., Ph.D., The Marlborough

\*ALDIS BIRDSEY BROWNE, LL.B., 1419 F Street

\*JAMES HOLDSWORTH GORDON, A.M., LL.B., 412 Fifth Street

ARCHIBALD HOPKINS, A.M., LL.B., 1826 Massachusetts Avenue

THOMAS SNELL HOPKINS, LL.B., Hibbs Building

WILLIAM BRUCE KING, A.M., LL.M., 1708 S Street

---

\* Nominated by the Alumni.



## CHAIRMAN OF THE BOARD OF TRUSTEES

JOHN BELL LARNER

## VICE-CHAIRMAN OF THE BOARD OF TRUSTEES

ARCHIBALD HOPKINS

## STANDING COMMITTEES OF THE BOARD OF TRUSTEES

*Executive.*—C. H. STOCKTON, H. C. DAVIS, W. J. FLATHER, A. HOPKINS.

A. LISNER, W. H. SINGLETON, M. VAN Z. WOODHULL.

*Finance.*—W. J. FLATHER, A. HOPKINS, M. VAN Z. WOODHULL.

*Subscriptions and Endowments.*—A. LISNER, H. B. F. MACFARLAND, H. C.

PERKINS, W. J. FLATHER, M. VAN Z. WOODHULL.

*Honorary Degrees.*—C. H. STOCKTON, H. G. BEYER, A. HOPKINS, H.

WHITE.

*Columbian College.*—W. H. SINGLETON, H. C. DAVIS, W. B. KING.

*Engineering.*—H. C. PERKINS, M. VAN Z. WOODHULL, T. W. NOYES.

*School of Graduate Studies and Teachers College.*—H. G. BEYER, A. T.

STUART, H. C. DAVIS.

*Law.*—J. B. LARNER, H. B. F. MACFARLAND, J. H. GORDON.

*Medicine, Dentistry, and Hospital.*—H. G. BEYER, J. B. LARNER, T. S.

HOPKINS.

*Associated Colleges.*—T. S. HOPKINS, A. B. BROWNE, T. W. NOYES.

## ADMINISTRATIVE OFFICERS

### THE UNIVERSITY

*President.*—CHARLES HERBERT STOCKTON, LL.D.

*Secretary.*—RICHARD COBB, A.B.

*Offices.*—2023 G Street.

*Treasurer.*—CHARLES WENDELL HOLMES.

*Office.*—2024 G Street.

*Librarian.*—ALFRED FRANCIS WILLIAM SCHMIDT, A.M.

*Office.*—2023 G Street.

### DEPARTMENT OF ARTS AND SCIENCES

*Dean.*—HOWARD LINCOLN HODGKINS, Ph.D.

*Dean of Columbian College.*—WILLIAM ALLEN WILBUR, A.M.

*Dean of the College of Engineering.*—HOWARD LINCOLN HODGKINS, Ph.D.

*Dean of Teachers College.*—WILLIAM CARL RUEDIGER, Ph.D.

*Recorder.*—ELEANOR WILSON HANCE, S.M.

*Offices.*—2023 G Street.

*Dean of the School of Graduate Studies.*—CHARLES EDWARD MUNROE,  
Ph.D., LL.D.

*Office.*—1325 H Street.

### LAW SCHOOL

*Dean.*—CHARLES NOBLE GREGORY, A.M., LL.D.

*Secretary.*—WILLIAM CABELL VAN VLECK, A.B., LL.B.

*Office.*—New Masonic Building.

### MEDICAL SCHOOL

*Dean.*—WILLIAM CLINE BORDEN, M.D.

*Librarian.*—HARRY KNOX CRAIG, M.D.

*Offices.*—1325 H Street.

### DENTAL SCHOOL

*Dean.*—JOHN ROLAND WALTON, D.D.S.

*Office.*—1325 H Street.

### NATIONAL COLLEGE OF PHARMACY

*Dean.*—HENRY E. KALUSOWSKI, M.D., Phar.D.

*Office.*—808 I Street.

### COLLEGE OF VETERINARY MEDICINE

*Dean.*—DAVID EASTBURN BUCKINGHAM, V.M.D.

*Office.*—2113 Fourteenth Street.

## PRESIDENT'S COUNCIL

(Arranged in Departmental Groups)

CHARLES HERBERT STOCKTON, LL.D.... PRESIDENT OF THE UNIVERSITY  
 RICHARD COBB, A.B..... Secretary of the University  
 CHARLES EDWARD MUNROE, Ph.D.,

Dean of the School of Graduate Studies

HERMANN SCHOENFELD, Ph.D., LL.D..... Professor of German  
 WILLIAM ALLEN WILBUR, A.M..... Dean of Columbian College  
 CHARLES CLINTON SWISHER, Ph.D., LL.D..... Professor of History  
 GEORGE NEELY HENNING, A.M..... Professor of Romance Languages  
 HOWARD LINCOLN HODGKINS, Ph.D.,

Dean of the College of Engineering

OSCAR ALEXANDER MECHLIN, C.E..... Professor of Civil Engineering  
 WILLIAM CARL RUEDIGER, Ph.D..... Dean of the Teachers College  
 ALFRED FRANCIS WILLIAM SCHMIDT, A.M..... Professor of German  
 CHARLES NOBLE GREGORY, A.M., LL.D.,

Dean of the Law School

JOHN PAUL EARNEST, A.M., LL.M..... Professor of Law  
 HENRY CRAIG JONES, A.B., LL.B..... Assistant Professor of Law  
 WILLIAM CLINE BORDEN, M.D..... Dean of the Medical School  
 SHEPHERD IVORY FRANZ, Ph.D..... Professor of Physiology  
 JOHN ROLAND WALTON, D.D.S..... Dean of the Dental School  
 HENRY CLAY THOMPSON, D.D.S..... Professor of Operative Dentistry  
 HENRY E. KALUSOWSKI, Phar.D.,

Dean of the National College of Pharmacy

DAVID EASTBURN BUCKINGHAM, V.M.D.,

Dean of the College of Veterinary Medicine

### COMMITTEES OF THE PRESIDENT'S COUNCIL

*Catalogue and Other Publications.*—The President, the Secretary, Professors HODGKINS, WILBUR, and SWISHER.

*Admissions.*—Professors WILBUR, MUNROE, and RUEDIGER.

*Schedule.*—Professors HENNING, MECHLIN, and RUEDIGER.

*Library.*—Professors SCHOENFELD, Henning, the Librarian.

*Student Organizations.*—Professors RUEDIGER, HENNING, and McNEMAR.

*Debating.*—Professors McNEMAR, FERNON; MESSRS. BICKEL and SELTZER.

## UNIVERSITY MEMBERS OF FACULTIES AND TEACHING STAFF \*

(Arranged with the exception of the President, in groups, in the order  
of appointment.)

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY

### PROFESSORS

J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus  
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,

Dean Emeritus of the Faculty of Medicine and Professor of Obstetrics  
THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.,

Professor of Zoology, Emeritus

GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine

HOWARD LINCOLN HODGKINS, Ph.D.....Dean of the Department of  
Arts and Sciences, Dean of the College of Engineer-  
ing, and Professor of Mathematics

HENRY CRÈCY YARROW, M.D.....Professor of Dermatology, Emeritus

DANIEL KERFOOT SHUTE, A.B., M.D.,

Professor of Neuro-Anatomy, and Clinical Professor of Ophthalmology

HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German

STERLING RUFFIN, M.D.....Professor of Medicine

CHARLES EDWARD MUNROE, Ph.D., LL.D.,

Dean of the School of Graduate Studies and Professor of Chemistry

GEORGE PERKINS MERRILL, Ph.D., Professor of Geology and Mineralogy

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology

FRANK WIGGLESWORTH CLARK, Sc.D....Professor of Mineral Chemistry

MELVILLE CHURCH, LL.M.....Professor of the Law of Patents

WILLIAM ALLEN WILBUR, A.M.,

Dean of Columbian College and Professor of English

JOHN WESLEY BOVÉE, M.D.....Professor of Gynecology

THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine

AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery

CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History

RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology

---

\* NOTE—In many instances members of the Teaching Staff give only part time to the University. For the names of the members of the Faculties and Teaching Staff of the Associated Colleges, see Part III of this catalogue.



FRANCIS RANDALL HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases

WALTER COLLINS CLEPHANE, LL.M..... Professor of Law

MITCHELL CARROLL, Ph.D.,

Professor of Archaeology and the History of Art

PAUL BARTSCH, Ph.D..... Professor of Zoology

EDWIN CHARLES BRANDENBURG, LL.M..... Professor of Law

ARTHUR PETER, LL.B..... Professor of Law

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence

ALBERT LIVINGSTON STAVELY, M.D.... Clinical Professor of Gynecology

GEORGE NEELY HENNING, A.M..... Professor of Romance Languages

JOHN PAUL EARNEST, A.M., LL.M..... Professor of Law

JOHN ROLAND WALTON, D.D.S..... Dean of the Dental School and

Professor of Prosthetic Dentistry and Orthodontia

WILLIAM ALANSON WHITE, M.D.,

Professor of Psychiatry, and Clinical Professor of Neurology

ALBERT BURNLEY BIBB..... Professor of Architecture

GEORGE MILLER STERNBERG, M.D., LL.D.,

Professor of Preventive Medicine

ASAPH HALL, JR., Ph.D..... Professor of Astronomy

ARTHUR AUGUSTIN SNYDER, M.D..... Clinical Professor of Surgery

ALBERT MANN, Ph.D..... Professor of Botany

SHEPHERD IVORY FRANZ, Ph.D.,

Professor of Physiology and Professor of Experimental Psychology

CHARLES SIDNEY SMITH, Ph.D..... Professor of Greek and Latin

WENDELL PHILIPS STAFFORD, A.M., LL.D..... Professor of Law

WILLIAM CLINE BORDEN, M.D.,

Dean of the Medical School and Professor of Surgery

JOHN RYDER WELLINGTON, M.D..... Clinical Professor of Surgery

CHARLES STANLEY WHITE, M.D.,

Clinical Professor of Oral Surgery and Associate in Surgery

WILLIAM KENNEDY BUTLER, A.M., M.D.... Professor of Ophthalmology

BUCKNER MAGILL RANDOLPH, M.D.,

Professor of Materia Medica and Therapeutics

LUTHER HALSEY REICHELDERFER, M.D.... Clinical Professor of Surgery

JAMES DUDLEY MORGAN, A.B., M.D.,

Clinical and Associate Professor of Medicine

LOUIS ANATOLE LA GARDE, M.D..... Professor of Military Surgery

WILLIAM CARL RUEDIGER, Ph.D.,

Dean of Teachers College, and Professor of Educational Psychology

ALFRED FRANCIS WILLIAM SCHMIDT, A.M.,

Librarian and Professor of German

WILLIS LUTHER MOORE, Sc.D., LL.D., Professor of Practical Meteorology

WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.,

Professor of Meteorological Physics

CHARLES NOBLE GREGORY, A.M., LL.D.,

Dean of the Law School and Professor of Law

GIDEON BROWN MILLER, S.B., M.D.... Clinical Professor of Gynecology

JULIAN MAYO CABELL, M.D..... Clinical Professor of Obstetrics

EDWARD ELLIOTT RICHARDSON, M.D., Ph.D.... Professor of Philosophy

GEORGE WASHINGTON LITTLEHALES, C.E., Professor of Nautical Science

OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology  
and Associate Professor of Anatomy

EDWIN VIVIAN DUNSTAN, C.E..... Professor of Civil Engineering

OSCAR ALEXANDER MECHLIN, C.E..... Professor of Civil Engineering

EVERETT FRASER, A.B., LL.B..... Professor of Law

JOHN BRADFORD BRIGGS, M.D.. Professor of Bacteriology and Pathology

W. SINCLAIR BOWEN, M.D..... Clinical Professor of Obstetrics

EDGAR PASQUAL COPELAND, M.D.,

Professor of Hygiene and Associate in Pediatrics

OSCAR ADDISON MACK McKIMMIE, M.D.,

Clinical Professor of Laryngology and Otology

LOUIS MACKALL, M.D..... Clinical Professor of Medicine

CARL LAWRENCE DAVIS, M.D..... Professor of Anatomy

JOHN WILMER LATIMER, LL.B..... Professor of Law

EDWARD RHODES STITT, A.B., M.D..... Professor of Tropical Medicine

ARTHUR BARTON CRANE, D.D.S. .... Professor of Oral Surgery

#### ASSOCIATE PROFESSORS

NOBLE PRICE BARNES, M.D., Associate Professor of Materia Medica and  
Therapeutics, and Clinical Associate in Medicine

JOHN ROBERT DE FARGES, D.D.S..... Associate Professor of Dental  
Metallurgy, Economics, Jurisprudence and Ethics

HURON WILLIS LAWSON, S.M., M.D.... Associate Professor of Obstetrics  
and Associate Obstetrician in Chief to  
the University Hospital and Dispensary

CHARLES TURK BASSETT, D.D.S.,

Associate Professor in Charge of Dental Infirmary

ALLEN SCOTT WOLFE, D.D.S.,

Associate Professor of Crown and Bridge Work

CADMUS LINDEN ODOR, D.D.S.,

Associate Professor of Operative Technics

WILLIAM FRANCIS LAWRENCE, D.D.S.,

Associate Professor of Prosthetic Technics

D. DE WITT BEEKMAN, D.D.S.,

Associate Professor of Materia Medica and Therapeutics

FRANK ADELBERT HORNADAY, S.B., M.D.,

Associate Professor of Chemistry

JOSEPH DUERSON STOUT, A.B., M.D.,

Associate Professor of Physiology and Pharmacology

HENRY KNOX CRAIG, M.D., Associate Professor of Bacteriology and  
Pathology and Curator of the Museum  
GEORGE MILLER SHARP, D.D.S. . . . Associate Professor of Orthodontia  
EUGENE ROGER STONE, D.D.S. . . . Associate Professor of Oral Surgery

## ASSOCIATES

DANIEL WEBSTER PRENTISS, M.D. . . . . Clinical Associate in Surgery  
JOHN BENJAMIN NICHOLS, M.D. . . . . Associate in Medicine and Dietetics  
HARRY HAMPTON DONNALLY, A.M., M.D.,  
Clinical Associate in Pediatrics  
WILLIAM FRANCIS MATTINGLY SOWERS, A.B., M.D., Associate in Surgery  
HENRY RANDALL ELLIOTT, M.D.,  
Associate in Physiology and Pharmacology  
JOHN T. KELLEY, M.D. . . . . Clinical Associate in Obstetrics  
WALTER ASHBY FRANKLAND, M.D. . . . . Clinical Associate in Medicine  
J. LEWIS RIGGLES, M.D. . . . . Associate in Gynecology  
FRANK LEECH, M.D. . . . . Clinical Associate in Pediatrics  
WILLIAM CABELL MOORE, M.D., . . . . . Associate in Medicine  
CHARLES AUGUSTUS SIMPSON, M.D. . . . . Associate in Dermatology  
COURSEN BAXTER CONKLIN, M.D. . . . . Associate in Medicine

## ASSISTANT PROFESSORS

NEVIL MONROE HOPKINS, Ph.D. . . . . Assistant Professor of Chemistry  
EDWIN ALLSTON HILL, Ph.D. . . . . Assistant Professor of Chemistry  
THOMAS MALCOLM PRICE, Ph.D. . . . . Assistant Professor of Chemistry  
RAY SMITH BASSLER, Ph.D. . . . . Assistant Professor of Geology  
OTIS DOW SWETT, S.M., LL.M. . . . . Assistant Professor of Chemistry  
CHARLES WARD MORTIMER, S.B., M.E.,  
Assistant Professor of Electrical Engineering  
FRANK CHARLES STARR, S.B. . . . Assistant Professor of Civil Engineering  
HIRAM COLVER MCNEIL, Ph.D.,  
Assistant Professor of Physical Chemistry  
ROBERT RUSS KERN, A.B.,  
Assistant Professor of Economics and Sociology  
LEVI RUSSELL ALDEN, A.M. . . . . Assistant Professor of History  
HENRY CRAIG JONES, A.B., LL.B. . . . . Assistant Professor of Law  
MERTON LEROY FERSON, A.M., LL.B. . . . . Assistant Professor of Law  
LESLIE CLEVELAND MCNEMAR, A.B.,  
Assistant Professor of International Law and Political Science  
ALBERT LEWIS HARRIS, B.S. in Arch.,  
Assistant Professor of Architecture

RICHARD COBB, A.B.,

Secretary of the University and Assistant Professor of English

BEDFORD BROWN, S.B.,..... Assistant Professor of Architecture

# LECTURERS AND INSTRUCTORS

EDWARD GRANT SEIBERT, M.D.,

Instructor in Laryngology and Ophthalmology

OSCAR PHELPS AUSTIN, A.M..... Lecturer on Commercial Geography

FREDERICK EUGENE FOWLE, JR., S.B..... Lecturer on Astro-Physics

WILLARD STANTON SMALL, Ph.D..... Lecturer on Education

WALTER HIBBARD MERRILL, M.D.... Instructor in Electro-Therapeutics

HOBART SOUTHWORTH DYE, M.D.,

Instructor in Laryngology and Otology

TRUMAN ABBE, M.D..... Instructor in Surgery

ALFRED GEISES BUHRMAN..... Clerk of the Moot Court

VIRGIL B. JACKSON, M.D..... Instructor in Gynecology

EDMUND THOMAS MURDAUGH FRANKLIN, M.D.... Instructor in Surgery

WILLIAM J. FRENCH, M.D..... Instructor in Materia Medica

CHARLES WILBUR HYDE, M.D., Instructor in Medicine and Anaesthesia

JOHN WINSLOW TAYLOR, D.D.S..... Instructor in Prosthetic Technics

and Demonstrator in the Dental Infirmary

ADAM KEMBLE, M.D..... Instructor in Genito-Urinary Surgery

HOMER GIFFORD FULLER, M.D.... Instructor in Genito-Urinary Surgery

CHARLES GARDNER SHOEMAKER, D.D.S.,

Instructor in Operative Technics

HENRY CISSEL YOUNG, D.D.S.... Instructor in Prosthetic Technics and

Demonstrator in the Dental Infirmary

HAYNER HASKELL GORDON, Ph.D., Instructor in Mechanical Engineering

ROBERT WILBUR MORSE, S.B..... Instructor in Mechanical Engineering

CLINE N. CHIPMAN, M.D..... Instructor in Anaesthesia

BENJAMIN RUSH LOGIE, M.D..... Instructor in Neurology

GEORGE HENRY SCHWINN, M.D., Instructor in Psychiatry and Neurology

MARK RITTENHOUSE WOODWARD, E.E.,

Instructor in Electrical Engineering

ALEXANDER YELVERTON PEYTON GARNETT, M.D.,

Instructor in Obstetrics

HARRY HYLAND KERR, M.D..... Instructor in Operative Surgery

HARRY GRANT HODGKINS, A.B..... Instructor in Mathematics

WILLIAM JOHNSTON MALLORY, M.D... Instructor in Medicine

CAESARE LOUIS CONSTANTINI, D.D.S.,

In Charge of Clinical Instruction in Dentistry

ARTHUR DURDAN WEAKLEY, D.D.S..... Clinical Instructor in Dentistry

THOMAS LOCKE RUST, D.D.S..... Clinical Instructor in Dentistry

GEORGE BERTRAM ROPER MACDONALD, D.D.S.,

Clinical Instructor in Dentistry



WILLIAM CARL KILLINGER, D.D.S....Clinical Instructor in Orthodontia  
Z. WILBUR ALDERMAN, D.D.S.,

Clinical Instructor in Electro-Therapeutics

ROBERT EDWIN LAYTON, D.D.S.....Clinical Instructor in Dentistry

JULIA THECKLA MACMILLAN, M.S.....Instructor in Zoölogy

WILLIAM WRIGHT FRASER, A.B., B.L.....Lecturer in Mathematics

CHARLES EDWARD VAN ORSTRAND, S.M.....Lecturer on Mechanics

HARVEY LINCOLN CURTIS, Ph.D.....Lecturer on Physics

ELIJAH WHITE TITUS, Phar.D., M.D.....Instructor in Obstetrics

WILLIAM CABELL VAN VLECK, A.B., LL.B.....Instructor in Law

PHILIP ROGERS HOOTON.....Instructor in Architecture

MARIETTA STOCKARD, Lecturer on the Teaching of Children's Literature

DANIEL LE RAY BORDEN, M.D...Instructor in Surgery and Gynecology

ALBERT ELWOOD PAGAN, M.D.....Instructor in Gynecology

ARTHUR DEERIN CALL, A.M.....Lecturer on Elementary Education

JAMES WALTER BERNHARD, D.D.S. Instructor in Crown and Bridge Work

GEORGE TRAVER HARRINGTON, B.S. in Agri., BS. in Chem.,

Instructor in Botany

WILLIAM HENRY HUNTINGTON, M.D.,

Instructor in Laryngology and Otology

J. IRVING SLOAT, M.D.....Instructor in Pharmacology

J. A. F. PFEIFFER, M.D.....Special Instructor in Pathology

EDWARD CULLOM, A.M.....Instructor in French

LOYD HALL SUTTON, S.B., LL.B.....Instructor in Patent Law

EDWIN HENRY INGERSOLL, S.M.....Instructor in Chemistry

WALTON COLCORD JOHN.....Instructor in Spanish

BERNARD GLUECK, M.D.....Instructor in Psychiatry

HENRY WILLIAM JAEGER, M.D.....Instructor in Pharmacology

REBECCA SHERMAN ASHLEY.....Instructor in the History of Art

LOUIS COHEN, S.B.....Lecturer on Electricity

EDGAR LEE HEWETT.....Lecturer on Archaeology

#### ASSISTANTS AND DEMONSTRATORS

HENRY ALBERT LEPPER, B.S. in Chem.....Assistant in Chemistry

GERTRUDE RICHARDSON BRIGHAM, A.B.....Assistant in English

RALPH WEBSTER BENTON.....Student Assistant in History

BOYCE RICHARDSON BOLTON,

Student Assistant in Histology and Embryology

JOHN FRANK EVANSHA.....Student Assistant in Histology

ERWIN HARSCH.....Student Assistant in Drawing and Field Work

JARRETT MATTHEW HUDDLESTON,

Student Assistant in Bacteriology and Pathology

HELEN GLADYS KAIN.....Student Assistant in Chemistry

THERESA KARGER.....Student Assistant in Chemistry

JOHN MORRISS LADD,

Student Assistant in Bacteriology and Pathology



In addition to its general collections the Library of the Department of Arts and Sciences contains the library of the late Professor Richard Heintel, of the University of Vienna, containing 7200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7900 books and pamphlets in Greek and Roman literature, archaeology, and history; the Mount Vernon Alcove containing 4000 volumes in political history, international law, and the social sciences; and the divisional collections in engineering and mechanic arts and in education. It is open from 9 a.m. to 6.40 p.m.

The Law Library, containing 5901 volumes, is open from 9 a.m. to 10 p.m.

The Medical Library, containing 1618 volumes, is open from 9 a.m. to 10.30 p.m.

#### PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

*"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:*

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."





**PART II**

**DEPARTMENTS OF THE UNIVERSITY**



# DEPARTMENT OF ART AND SCIENCES

## FACULTY

CHARLES HERBERT STOCKTON, LL.D.....PRESIDENT OF THE UNIVERSITY  
 HOWARD LINCOLN HODGKINS, Ph.D.....Dean, Dean of the College of  
 Engineering, and Professor of Mathematics

\*THEODORE NICHOLAS GILL, M.D., Ph.D., LL.D.,  
 Professor of Zoology, Emeritus

HERMANN SCHOENFELD, Ph.D., LL.D..... Professor of German

CHARLES EDWARD MUNROE, Ph.D., LL.D.,  
 Dean of the School of Graduate Studies and Professor of Chemistry

\*GEORGE PERKINS MERRILL, Ph.D.,  
 Professor of Geology and Mineralogy

\*FRANK WIGGLESWORTH CLARKE, Sc.D... Professor of Mineral Chemistry

WILLIAM ALLEN WILBUR, A.M.,  
 Dean of Columbian College and Professor of English

CHARLES CLINTON SWISHER, Ph.D., LL.D... Professor of History

\*MITCHELL CARROLL, Ph.D.,  
 Professor of Archaeology and the History of Art

\*PAUL BARTSCH, Ph.D..... Professor of Zoology

GEORGE NEELY HENNING, A.M..... Professor of Romance Languages

ALBERT BURNLEY BIBB... Professor of Architecture

\*GEORGE MILLER STERNBERG, M.D., LL.D.,  
 Professor of Preventive Medicine

\*ASAPH HALL, JR., Ph.D..... Professor of Astronomy

\*ALBERT MANN, Ph.D..... Professor of Botany

CHARLES SIDNEY SMITH, Ph.D..... Professor of Greek and Latin

WILLIAM CARL RUEDIGER, Ph.D.,  
 Dean of Teachers College and Professor of Educational Psychology

ALFRED FRANCIS WILLIAM SCHMIDT, A.M.... Professor of German

\*WILLIS LUTHER MOORE, Sc.D., LL.D.,  
 Professor of Practical Meteorology

\*WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.,  
 Professor of Meteorological Physics

CHARLES NOBLE GREGORY, A.M., LL.D..... Professor of Law

EDWARD ELLIOTT RICHARDSON, M.D., Ph.D.... Professor of Philosophy

\*GEORGE WASHINGTON LITTLEHALES, C.E.,  
 Professor of Nautical Science

---

\* These professors are specialists who give only part of their time to the University.

EDWIN VIVIAN DUNSTAN, C.E... Professor of Civil Engineering  
 OSCAR ALEXANDER MECHLIN, C.E..... Professor of Civil Engineering  
 NEVIL MUNROE HOPKINS, Ph.D..... Assistant Professor of Chemistry  
 EDWIN ALLSTON HILL, Ph.D..... Assistant Professor of Chemistry  
 THOMAS MALCOLM PRICE, Ph.D... Assistant Professor of Chemistry  
 RAY SMITH BASSLER, Ph.D..... Assistant Professor of Geology  
 OTIS DOW SWETT, S.M, LL.M..... Assistant Professor of Chemistry  
 CHARLES WARD MORTIMER, S.B., M.E.,

Assistant Professor of Electrical Engineering

FRANK CHARLES STARR, S.B., Assistant Professor of Civil Engineering  
 HIRAM COLVER MCNEIL, Ph.D.,

Assistant Professor of Physical Chemistry

ROBERT RUSS KERN, A.B.,

Assistant Professor of Economics and Sociology

LEVI RUSSELL ALDEN, A.M..... Assistant Professor of History

LESLIE CLEVELAND MCNEMAR, A.B.,

Assistant Professor of International Law and Political Science

ALBERT LEWIS HARRIS, B.S. in Arch.,

Assistant Professor of Architecture

RICHARD COBB, A.B..... Assistant Professor of English

BEDFORD BROWN, S.B..... Assistant Professor of Architecture

OSCAR PHELPS AUSTIN, A.M..... Lecturer on Commercial Geography

FREDERICK EUGENE FOWLE, JR., S.B..... Lecturer on Astro-Physics

WILLIAM STANTON SMALL, Ph.D..... Lecturer on Education

HAYNER HASKELL GORDON, Ph.D.,

Instructor in Mechanical Engineering

ROBERT WILBUR MORSE, S.B..... Instructor in Mechanical Engineering

MARK RITTENHOUSE WOODWARD, E.E.,

Instructor in Electrical Engineering

HARRY GRANT HODGKINS, A.B..... Instructor in Mathematics

JULIA THECKLA MACMILLAN, S.M..... Instructor in Zoology

WILLIAM WRIGHT FRASER, A.B., B.L..... Lecturer in Mathematics

ALTON LEWIN KIBLER, Ph.D.. Instructor in Chemistry

CHARLES EDWIN VAN ORSTRAND, S.M..... Lecturer on Mechanics

HARVEY LINCOLN CURTIS, Ph.D..... Lecturer on Physics

PHILIP ROGERS HOOTON..... Instructor in Architecture

MARIETTA STOCKARD.. Lecturer on the Teaching of Children's Literature

ARTHUR DEERIN CALL, A.M. .... Lecturer on Elementary Education

GEORGE TRAVER HARRINGTON, B.S. in Agr., B.S. in Chem.,

Instructor in Botany

REBECCA SHERMAN ASHLEY..... Instructor in the History of Art

LOUIS COHEN, S.B..... Lecturer on Electricity

---

\* These professors are specialists who give only part of their time to the University.



**Faculty of the School of Graduate Studies**

President Stockton, Dean Munroe, Professors Gill, Hodgkins, Schoenfeld, Merrill, Clarke, Wilbur, Swisher, Carroll, Bartsch, Henning, Sternberg, Mann, Smith, Price, Ruediger, Schmidt, Moore, Humphreys, Gregory, Richardson, Littlehales, Dunstan, Mechlin, Assistant Professors Hopkins, Hill, Bassler, Mortimer, McNeil, Kern, Alden; Messrs. Van Orstrand, Curtis.

**Faculty of Columbian College**

President Stockton, Dean Wilbur, Professors Hodgkins, Schoenfeld, Munroe, Merrill, Swisher, Carroll, Bartsch, Henning, Smith, Ruediger, Schmidt, Richardson; Assistant Professors Bassler, Swett, Kern, Cobb; Mr. Woodward, Miss Macmillan, Messrs. Harrington, John, and Cullom.

**Faculty of College of Engineering**

President Stockton, Dean Hodgkins, Professors Schoenfeld, Munroe, Merrill, Wilbur, Henning, Schmidt, Bibb, Dunstan, Mechlin; Assistant Professors Swett, Starr, Mortimer, Harris, Brown; Messrs. Gordon, Morse, Woodward.

**Faculty of Teachers College**

President Stockton, Dean Ruediger, Professors Hodgkins, Schoenfeld, Munroe, Wilbur, Swisher, Bartsch, Henning, Smith, Schmidt, Richardson; Assistant Professors Kern, Cobb; Messrs. Small, Call; Miss Stockard.

## SCHOOL OF GRADUATE STUDIES

### HIGHER DEGREES

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (S.M.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

### ADMISSION

Candidates for admission to courses for higher degrees must make application to the Dean of the School of Graduate Studies on application blanks, which may be obtained of him or of the Secretary of the University. Candidates must present the diplomas they hold, or certificates that they have received such diplomas, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

### DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the course of study pursued must have been such as to qualify the candidate for pursuing the subjects chosen for the Master's or other higher degree sought. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated University subjects approved by the Faculty upon recommendation of the professors in charge and to present a satisfactory thesis. Only one of the minor topics may be selected from the University subject which includes the major topic. Work for which this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete three full courses of studies, of two or three hours each, distributed

among three University subjects, not more than six hours of which shall be given to any one subject. These subjects must have the approval of the Faculty on the recommendation of the professors in charge. The candidate must also present a thesis in the field to which the major subject belongs.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done in satisfaction of the requirements for the Bachelor's degree shall be counted again for a higher degree.

#### HIGHER DEGREES IN ENGINEERING

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued, and present an acceptable thesis, together with a bibliography. Three full courses is the minimum required as constituting a full year's work. The courses chosen must be passed upon by the Faculty of Graduate Studies and have the approval of the professors under whom they are to be taken.

#### DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects, has engaged in research under university auspices for a period of not less than three years, has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for this degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for his graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar

to that required here, but one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies, one of which minors may be in the subject which includes the major topic—the combination to be approved by the Faculty of Graduate Studies. These must be pursued under the guidance of a committee consisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics, but in general the major topic should be pursued during the whole time devoted to graduate work, and each minor topic during at least one year. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a thesis upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

#### EXAMINATIONS

Candidates must pass written examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final written examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to warrant such an examination being taken. If a candidate has satisfactorily passed his final written examination, he may be permitted to complete his thesis away from the University.

#### DEFENSE OF THE THESIS

Before a candidate can be recommended to the Board of Trustees for the Doctor of Philosophy degree, he must have successfully defended his thesis in public before a Board of Experts not officially connected with the University. Before the candidate can be permitted to undertake the defense of his thesis, the thesis must have been favorably reported on and recommended for defense by the professor having supervision over the candidate's major topic, and by a co-referee appointed from the Faculty of Graduate Studies.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Applied Mathematics, Archaeology, Architecture, Astronomy, Astro-Physics, Bacteriology, Botany, Chemistry, Economics, Education,



Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology and Embryology, History, History of Art, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Nautical Science, Pathology, Philosophy, Physics, Physiology and Pharmacology, Political Sciences, Preventive Medicine, Psychology, Romance Language and Literature, Sociology, Zoology.

#### REGULATIONS REGARDING THESES

Theses in their final form must be presented to the Dean on the dates announced in the University Calendar. They must be typewritten on official thesis paper, which may be obtained from the Treasurer of the University. The thesis will be presented by the Dean to the Chairman of the Committee on the candidate and the co-referee appointed from and by the Faculty for examination as to its merits when, on a favorable report by them, it may be defended in the Public Disputation. After their acceptance, theses, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate shall arrange, to the satisfaction of the Faculty, to print his thesis under the supervision of the professor in charge of his major subject, within one year after the degree is granted, and he shall present one hundred copies to the University, to be distributed among institutions of learning.

#### DOCTORATE DISPUTATIONS

The Twenty-third Doctorate Disputation was held publicly in University Hall, May 19, 1913. The thesis that was successfully defended, the candidate and the members of the board of experts were as follows:

*Thesis:* The Evangelical Revival: A Vital Factor in the Reconstruction of English Life in the Eighteenth Century. By Rev. ELMER EUGENE MARSHALL, A.B., 1889, Ohio Wesleyan University, S.T.B., 1894, Boston University. Before REV. WILLIAM A. HAGGERTY, A.B., A.M., Ph.D., Pastor Petworth Methodist Episcopal Church; WILLIAM M. DAVIDSON, A.B., LL.D., Superintendent Public Schools, D.C.; Rev. LUTHER HESS WARING, A.B., A.M., Ph.D., Pastor Evangelical Lutheran Church of Georgetown. Professor CHARLES CLINTON SWISHER, Ph.D., LL.D., presiding.

The record of the Twenty-Fourth Doctorate Disputation, held publicly on September 29, 1913, was as follows:

*Thesis:* The Commodities' Clause: A Treatise on the Development and Enactment of the Commodities' Clause and its Construc-

tion when Applied to Interstate Railroads Engaged in the Coal Industry. By THOMAS LATIMER KIBLER, A.B., 1904, Randolph-Macon College; A.M., 1908, The George Washington University. Before MARTIN A. KNAPP, A.M., LL.D., Presiding Judge, U. S. Court of Commerce; Honorable JOHN H. MARBLE, Interstate Commerce Commissioner; Honorable ROBERT F. BROUSSARD, M.C., Senator-Elect. BLACKBURN ESTERLINE, Special Assistant to the Attorney General, presiding.

## THE COLLEGES

The College session of 1914-15 begins Wednesday, September 30, 1914.  
The Colleges are open to men and women.

### ADMISSION

Every applicant for admission is required to present a testimonial of good character and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

*The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." For prescribed studies see the specifications of each college.*

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

### ENTRANCE EXAMINATIONS

The regular examinations for admission are held in May.  
The following is the schedule for 1914:

#### Monday, May 25, 1914

Elementary Latin.....	9.00-11.00
Plane Geometry.....	11.00- 1.00
Physics.....	2.00- 4.00
Greek.....	2.00- 5.00

#### Tuesday, May 26

Elementary Algebra.....	9.00-11.00
Elementary French.....	11.00- 1.00
Elementary German.....	2.00- 4.00
Ancient History.....	4.00- 6.00

## Wednesday, May 27

Plane Trigonometry.....	9.00-11.00
Advanced French, Advanced German.....	11.00- 1.00
English.....	2.00- 5.00

## Thursday, May 28

Advanced Algebra.....	9.00-11.00
Solid Geometry.....	11.00- 1.00
Chemistry; Advanced Latin.....	2.00- 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on nine and one-half units. These units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two and one-half units), and one other language (two units); the remaining two units will be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

## DEFINITION OF REQUIREMENTS

## English

*(Three units)*

The requirements in English are those recommended by the Conference on Uniform Entrance Requirements in English. These recommendations are as follows:

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

*English Grammar and Composition*

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school, and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description, and easy exposition and argument based upon simple outlines.



It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

### *Literature*

The second object is sought by means of two lists of books, headed respectively, *reading* and *study*, from which may be framed a progressive course in literature covering four years. In connection with both lists the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages, both in verse and in prose. As an aid to literary appreciation he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

1. *Reading*.—The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from which at least ten units\* are to be selected, two from each group:

a. The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings; and Daniel; together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; the Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; Virgil's *Æneid*. The Odyssey, Iliad, and *Æneid* should be read in English translations of recognized literary excellence.

For any unit of this group a unit from any other group may be substituted.

b. Shakespeare's *Merchant of Venice*; *Midsummer Night's Dream*; *As You Like It*; *Twelfth Night*; *Henry the Fifth*; *Julius Caesar*.

c. Defoe's *Robinson Crusoe*, Part I; Goldsmith's *Vicar of Wakefield*; either Scott's *Ivanhoe* or Scott's *Quentin Durward*; Hawthorne's *House of the Seven Gables*; either Dickens' *David Copperfield* or Dickens' *Tale of Two Cities*; Thackeray's *Henry Esmond*; Mrs. Gaskell's *Cranford*; George Eliot's *Silas Marner*; Stevenson's *Treasure Island*.

d. Bunyan's *Pilgrim's Progress*, Part I; The Sir Roger de Coverley Papers in the *Spectator*; Franklin's *Autobiography* (condensed); Irving's *Sketch Book*; Macaulay's *Essays on Lord Clive and Warren Hastings*;

---

\*Each unit is set off by semicolons.

Thackeray's English Humourists; Selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's Oregon Trail; either Thoreau's Walden or Huxley's Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's Inland Voyage and Travels with a Donkey.

*e.* Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village; Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal; Scott's Lady of the Lake; Byron's Childe Harold, Canto IV, and Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Poe's Raven, Longfellow's Courtship of Miles Standish, and Whittier's Snow Bound; Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City.

2. *Study*.—This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. For this close reading are provided a play, a group of poems, an oration, and an essay, as follows:

Shakespeare's *Macbeth*; Milton's *L'Allegro*, *Il Penseroso*, and *Comus*; either Burke's Speech on Conciliation with America or both Washington's Farewell Address and Webster's First Bunker Hill Oration; either Macaulay's Life of Johnson or Carlyle's Essay on Burns.

### *Examination*

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The first part of the examination will be upon ten units chosen in accordance with the plan described earlier, from the lists headed *reading*; and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development, and other qualities of style and treatment as may be fairly expected of boys and girls. In

grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *study*. The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for *study*, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

#### Latin

##### *Elementary (two units)*

a. I. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

II. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Caesar.

b. Caesar: Any four books of the Gallic War, preferably the first four.

##### *Advanced (two units)*

a. Cicero: Any six orations from the following list, but preferably the first six mentioned. The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of *Æneid*.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

#### Greek

##### *Elementary (two units)*

a. I. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.



II. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions. The examination in grammar and prose composition will be based on the first two books of Xenophon's *Anabasis*.

b. Xenophon: The first four books of the *Anabasis*.

*Advanced (one unit)*

a. Homer: The first three books of the *Iliad* (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's *Anabasis*.

**French**

*Elementary (two units)*

Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of five periods per week.

*Advanced (two units)*

Candidates in advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's *French Grammar* or Grandgent's *Essentials of French Grammar* is recommended.

**Spanish**

*(Two units)*

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.



## German

*Elementary (two units)*

Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

*Advanced (two units)*

Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

## History

In this subject special importance is attached to preparation in geography.

*Ancient (one unit)*

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's or West's History of the Roman People.

*Mediaeval and Modern European History (one unit)*

As much as is contained in Myer's History of Mediaeval and Modern Europe.

*English History (one unit)*

As much as is contained in Larned's or Cheyney's History of England.

*American History with the Elements of Civil Government (one unit)*

As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

## Mathematics

*Elementary Algebra (one and one-half units)*

I. Algebra to Quadratics: The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest

common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

II. Quadratics, etc.: Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

*Advanced Algebra (one-half unit)*

The progressions; the elementary treatment of permutations and combinations; the use of four and five place tables and logarithms; undetermined coefficients; the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents; the elementary treatment of the theory of equations.

*Plane Geometry (one unit)*

General text propositions, including the solution of simple original exercises and numerical problems.

*Solid Geometry (one-half unit)*

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

*Plane Trigonometry (one-half unit)*

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

**Physics**

*(One unit)*

It is recommended that the candidate's preparation should include:

- a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

## Chemistry

## (One unit)

The candidate's preparation in chemistry should include:

a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.

b. Instruction by lecture-table demonstrations.

c. The study of at least one modern text-book.

*Requirements.*—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur, phosphorus, silicon, potassium, sodium, calcium, magnesium, zinc, copper, mercury, silver, aluminum, lead, tin, iron, manganese, chromium.*

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

## Additional Subjects

Certificates will be accepted in botany, zoology, physiology, physiography, political economy, drawing, music, and other accredited subjects in secondary schools.

*Manual-training High School Subjects*

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, will be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

### *Business High School Subjects*

Commercial subjects in business high schools or schools of similar grade, when duly certified, will be credited as follows:

Accounting and Finance. (One unit.)

Bookkeeping. (Two units.)

Business Organization. (One unit.)

Commercial Law. (One unit.)

Government and Industrial Problems. (One-half unit.)

Commercial History. (One-half unit.)

Commercial and Physical Geography. (One-half unit.)

### ADMISSION TO ADVANCED STANDING

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

### SPECIAL STUDENTS

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

### SCHOLARSHIPS AND PRIZES

Applications for scholarships should be filed with the Dean of the College in which the student is registered not later than September fifteenth. All Scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked. All designations to scholarships are awarded by the President's Council on the recommendation of a Dean.

### Scholarships for Competition

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance examinations. Holders of these scholarships are expected to pursue a regular



course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

*Kendall Scholarship.*—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

*University Scholarships.*—The University offers also six scholarships, to be awarded annually to members of the graduating classes of any of the Washington High Schools. These scholarships continue throughout the undergraduate course, and students holding them pay only the matriculation, library, laboratory, and graduation fees.

#### Scholarships for Assignment

*Davis Scholarship.*—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

*Mary Lowell Stone Scholarship.*—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

*Maria M. Carter Scholarship.*—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

*Farnham Scholarship.*—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

*Withington Scholarship.*—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

*Walker Scholarship.*—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an annual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

*Morehouse Scholarship.*—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

*Henry Harding Carter Scholarships.*—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consists of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

*Admiral Powell Scholarships.*—The Admiral Powell Scholarships were founded by Admiral Powell, U. S. Navy. The income from this

endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, to warrant officers who are preparing for examination for appointment as Ensign, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	HOURS
Navigation and Nautical Astronomy.....	2
Algebra and Geometry.....	3
Trigonometry.....	1½
Mechanical and Machine Drawing.....	4
English.....	3
French.....	3
German.....	3
Spanish.....	3
International Law.....	3
Commercial Geography.....	2
Boilers and Power Plants.....	3
Measurement of Power.....	2
Electricity.....	3
Electrical Engineering.....	6

*Ministerial Aid.*—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity in the regular courses of Columbian College, preparing for the ministry and not yet ordained. Any student receiving Ministerial Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and of not more than four hours in any one week.

*University Aid.*—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be given

to undergraduate students in regular courses in the Department of Arts and Sciences, financially dependent on parents, who are residents of the District of Columbia or its immediate vicinity and whose circumstances warrant pecuniary assistance. Any student receiving University Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and for not more than four hours in any one week.

*Columbian Women Loan Fund.*—The Columbian Women have established a fund from which money is loaned to women students, preference being given to women who have already begun work in the University and who need assistance in continuing it. The administration of the fund remains with the Columbian Women.

### PRIZES

(Only candidates for degrees may compete for these prizes.)

*Staughton and Elton Prizes.*—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

*Ruggles Prizes.*—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

*Davis Prizes.*—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL.D., of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

*Daughters of the American Revolution Prizes.*—These prizes founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediaeval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

*The Thomas F. Walsh Prize.*—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the regular classes of Mediaeval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

*E. K. Cutter Prize.*—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that



member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

*Willie E. Fitch Prize.*—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

*The Gardiner G. Hubbard Memorial Prize.*—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that member of the graduating class who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

*Muth Prize.*—Geo. F. Muth and Company offer a set of drawing instruments to the student taking Advanced Mechanical Drawing who makes the highest average record in that subject and in the previous year's Mechanical Drawing.

*Colonial History Prize.*—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

*James Macbride Sterrett, Jr., Prize.*—Founded by Professor James Macbride Sterrett in memory of his son, consists of a gold medal annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

*The Chi Omega Prize in Philosophy.*—An annual prize of fifteen dollars is offered by the Phi Alpha Chapter of the Chi Omega Fraternity for the best essay on a philosophical subject to be announced at the close of the preceding academic year by the Committee in charge. Essays must meet the requirements defined by the Committee and be submitted on or before April 1. Only women students who are members of a senior class in the Department of Arts and Sciences, and who have previously completed the courses in General Psychology, Logic, and the History of Philosophy, are eligible to compete.

*Chi Omega Prize in Sociology.*—An annual prize of \$15.00 is offered by the Chi Omega Fraternity for the best essay on a sociological subject. All women students registered in the courses in Sociology are eligible to compete for this prize. The subjects of the essays are to be chosen by the competitors with the approval of the Professor of Sociology. The prize will be awarded by a committee of three, consisting of the Professor of Sociology, the Dean of Columbian College, and a third member selected by these two. Essays in competition for this prize must be submitted to the Professor of Sociology on or before May 1st.



**Davis Prize Speaking**

The Davis Prize Speaking is held on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of five dollars, of ten dollars, and of fifteen dollars annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of Columbian College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the Columbian College.

**PRIZES AWARDED. 1912-13.**

Staughton Prize.....ARTHUR HUBER REDFIELD  
Ruggles Prizes:

First Prize.....LOUIS ARCHER MAXSON  
Second Prize.....ERWIN HARSCH

Davis Prizes:

First Prize.....REX EMIR KINSELL  
Second Prize.....HILDA LOUISE ULRICKSON  
Third Prize.....ARTHUR HUBER REDFIELD

Daughters of the American Revolution } .....LEILA FORDHAM SCOTT  
Prizes.....} OLIVIA ALEXANDER TAYLOR

Thomas F. Walsh Prize.....LULU MIGNONNE McCABE

E. K. Cutter Prize.....LULU MIGNONNE McCABE

Willie E. Fitch Prize.....JOHN BROCKWELL

Gardiner G. Hubbard Memorial Prize.....ARTHUR HUBER REDFIELD

Muth Prize.....EDWARD BILMER NICKLES

Colonial History Prize.....EVA PHELPS KELLEY

James McBride Sterrett, Jr. Prize.....ALBERT THURSTON ST. CLAIR

Chi Omega Prize in Philosophy.....LULU MIGNONNE McCABE

Sigma Kappa Prize.....ELIZABETH WEBER

Medal for Intercollegiate Debating.....HARRY GABRIEL SELTZER

**RELIGIOUS WORK**

The student movement in Association work is represented by the Young Men's Christian Association of the University, which was organized in the fall of 1905. The Association plans and conducts religious work among the men of the University. The Association calendar includes Bible study clubs, a weekly chapel service, and occasional men's meetings.

Similar lines of religious work are conducted among the women students by the Young Women's Christian Association.

#### College Chapel

Chapel Services are held at 12.20 p.m., Monday, Wednesday, and Friday, throughout the academic year.

The Deans of the Colleges will confer with students as they may desire on questions concerning their welfare and will co-operate with them in all ways to make the college life one of personal helpfulness.

#### FEES

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	2
3. Tuition fee per annum for each hour per week of undergraduate courses leading to the degrees of A.B. and S.B.....	10
The maximum fee charged in any one year is \$150.	
4. Tuition fee per annum for graduate courses leading to the degrees of A.M., S.M., C.E., E.E., M.E., and Ph.D.....	150
Each separate topic.....	50
Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of \$50 per annum for each topic pursued by them.	
5. Registration fee for students taking problems of the Beaux Arts Society.....	2
6. Laboratory courses:	
Material fees:	
Experimental Psychology.....	2
Geology 1, Zoology, Botany, each.....	5
Chemistry 2, 3, 7, and 28; Electrical Engineering; Physics, each.....	10
Chemistry 4 (Assaying).....	20
Chemistry, except 2, 3, 4, 7, and 28, each.....	25
Deposits to cover breakage of apparatus issued, the amount paid in excess of breakage to be returned:	
Chemistry, 2, 3, 7, and 28, each.....	10
Chemistry, except 2, 3, 4, 7, and 28, each.....	25
7. Fee for graduation.....	10
8. Tuition fee for the following special course, not taken by candidates for a degree:	
Chemistry 4 (Assaying).....	40
9. In determining tuition fees, three hours of laboratory work in Chemistry, and two hours of laboratory work in other subjects count as one hour.	
10. Fee for certificates under the seal of the University.....	2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be

made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

#### PAYMENT OF FEES

Matriculation, library, and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. All fees are payable at the office of the Treasurer of the University, 2024 G Street.

#### BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,

*The George Washington University,*

*2023 G Street, Washington, D. C.*

## COLUMBIAN COLLEGE

### ADMISSION

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements (p. 51) of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirement must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

For admission to advanced standing or as special students, see p. 60.

### REQUIREMENTS FOR DEGREES

The undergraduate degrees offered by Columbian College are Bachelor of Arts, Bachelor of Science in Chemistry, and Bachelor of Science in Medicine. To be recommended for any one of these degrees, the student must be registered for at least one academic year in Columbian College; must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses. An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year. No time limit for the course is prescribed and the degree is given when the total of prescribed and elective studies is completed.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the student shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

### FOR THE DEGREE OF BACHELOR OF ARTS

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study including a group of prescribed subjects, and aggregating at least sixty "hours."



There are four groups of prescribed subjects for the first two years of the college course. Every candidate for the degree of Bachelor of Arts selects one of these groups of prescribed subjects, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years are elective, subject to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the four groups of prescribed subjects is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would constitute needed preparation for the Department of Law, or further study in the political sciences.

(NOTE—Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

#### Group I

	HOURS
English.....	6
History.....	3
Languages*.....	9
Latin.....	6
Mathematics.....	3
Psychology and Logic.....	3
Electives.....	30

#### Group II

	HOURS
English.....	6
French.....	3
German.....	6
History.....	6
Mathematics or Science.....	3
Psychology and Logic.....	3
Romance Language.....	3
Electives.....	30

---

\* To be elected from Greek, French, German.

**Group III**

	HOURS
English.....	3
History.....	3
Mathematics.....	6
Modern Languages.....	6
Psychology and Logic.....	3
Science.....	9
Electives.....	30

**Group IV**

	HOURS
Economics.....	3
English.....	3
History.....	6
Mathematics.....	3
Modern Languages or Latin.....	6
Political Science.....	6
Psychology and Logic.....	3
Electives.....	30

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY****Freshman Year**

	HOURS
Chemistry, 1, 2.....	5
English, 1 or 2.....	3
Mathematics, 3 or 6.....	3
French or German.....	3
Geology, 1.....	2

**Sophomore Year**

	HOURS
Chemistry, 3, 20.....	5
French or German.....	3
Mathematics, 9 or 12.....	3
Physics, 1, 2.....	5

**Junior Year**

	HOURS
Chemistry, 21, (4), 23.....	6
French or German.....	3
Mathematics, 20 or 21.....	3
Electrical Engineering, 7.....	3

**Senior Year**

	HOURS
Chemistry, 6, 24, 25, 26 or 27.....	9
Economics or History.....	3
Geology, 2.....	2

## POLITICAL SCIENCE COURSES

Columbian College offers systematic instruction in the various branches of the political sciences. This education gives a training that will fit for consular and diplomatic positions and for the public service of the United States, while imparting that general culture and equipment necessary for efficient citizenship and the intelligent grasp of public questions. It is also a suitable training for those who expect to enter commercial life, or to engage subsequently in the study of law.

Regular students who are preparing for the Government Service should register for Group IV of the curriculum requirements for the degree of Bachelor of Arts, and should elect, also, the subjects named in Section 2 of the "Regulations Governing Examinations Promulgated by the Board of Examiners, December 13, 1906."

Special students who are preparing for the Consular Service examinations should register for such courses as relate to subjects named in Section 2, of the Government Regulations.

An Executive order of June 27, 1906, governing appointments and promotions in the Consular Service of the United States, included the following provisions of special interest to students having in view the Consular Service:

The Secretary of State, or such officer of the Department of State as the President shall designate, the Director of the Consular Service,\* the Chief of the Consular Bureau,\* and the Chief Examiner of the Civil Service Commission, or some person whom said Commission shall designate, shall constitute a Board of Examiners for admission to the consular service.

It shall be the duty of the Board of Examiners to formulate rules for and hold examinations of applicants for admission to the consular service.

The scope and method of the examinations shall be determined by the Board of Examiners, but among the subjects shall be included at least one modern language other than English; the natural, industrial and commercial resources and the commerce of the United States, especially with reference to the possibilities of increasing and extending the trade of the United States with foreign countries; political economy; elements of international, commercial and maritime law.

Examination papers shall be rated on a scale of 100, and no person rated at less than 80 shall be eligible for certification.

No one shall be examined who is under twenty-one or over fifty years of age, or who is not a citizen of the United States, or who is not of good character and habits and physically and mentally qualified for the proper performance of consular work, or who has not been specially designated by the President for appointment to the consular service subject to examination.

---

\*As amended by Executive order of December 8, 1909.

**REGULATIONS GOVERNING EXAMINATIONS PROMULGATED BY THE  
BOARD OF EXAMINERS, DECEMBER 13, 1906**

1. The examinations will be the same for all grades and will be to determine a candidate's eligibility for appointment in the consular service, irrespective of the grade for which he may have been designated for examination and without regard to any particular office for which he may be selected.

2. The examinations will consist of an oral and a written one, the two counting equally. The object of the oral examination will be to determine the candidate's business ability, alertness, general contemporary information, and natural fitness for the service, including moral, mental, and physical qualifications, character, address, and general education and good command of English. In this part of the examination the applications previously filed will be given due weight by the Board of Examiners, especially as evidence of the applicant's business experience and ability. The written examination will include those subjects mentioned in the Executive order, to wit, at least one modern language other than English—French, German, or Spanish;\* the natural, industrial, and commercial resources and the commerce of the United States, especially with reference to possibilities of increasing and extending the foreign trade of the United States; political economy, and the elements of international, commercial, and maritime law. It will likewise include American history, government, and institutions; political and commercial geography; arithmetic (as used in commercial statistics, tariff calculations, exchange, accounts, etc.); the modern history, since 1850, of Europe, Latin America, and the Far East, with particular attention to political, commercial, and economic tendencies. In the written examination, composition, grammar, punctuation, spelling, and writing will be given attention.

3. To become eligible for appointment, except as student interpreter, in a country where the United States exercises extraterritorial jurisdiction, the applicant must pass the examination outlined above, but supplemented by questions to determine his knowledge of the fundamental principles of common law, the rules of evidence, and the trial of civil and criminal cases.

4. The examinations to be given candidates for appointment as student interpreters will follow the same course as in the case of other consular officers, provided, however, that no one will be examined for admission to the consular service as a student interpreter who is not between the ages of nineteen and twenty-six, inclusive, and unmarried; and, provided further, that upon appointment each student interpreter shall sign an agreement to continue in the service so long as his services may be required, within a period of five† years.

5. Upon the conclusion of the examinations the names of the candidates who shall have attained upon the whole examination an average mark of at least 80, as required by the Executive order, will be certified by the Board to the Secretary of State as eligible for appointment in the consular service, and the successful candidates will be informed that this has been done.

6. The names of candidates will remain on the eligible list for two years, except in the case of such candidates as shall within that period be appointed, or as shall withdraw their names, and of candidates holding subordinate positions in the consular service, when eligibility shall not expire until appointment to consular rank or until separation from

---

\*As amended by the Board of Examiners, February 18, 1911.

†As amended by the Act approved May 21, 1908.



the service. Candidates whose names have thus been dropped from the eligible list will not again be eligible for appointment unless upon fresh application, designation anew for examination, and the successful passing of such second examination.\*

Students who seek a designation for consular examination should apply to the Department of State for full information. Consular service examinations are held in Washington only.

#### SUGGESTED COURSE FOR THE POLITICAL SCIENCE STUDENT FOR THE DEGREE OF BACHELOR OF ARTS

##### *First Year.*

	HOURS
Economics 1 or 2 (General Economics).....	3
English 1 or 2 (English Rhetoric).....	3
French.....	3
History 1, 2 or 5, 6 (Mediaeval History).....	3
Mathematics, 3 or 6.....	3

##### *Second Year.*

Economics 22, 23 (General Sociology, Modern Social Problems).....	2
French.....	3
German.....	3
History 3, 4 (Modern European); 33 (Current History)....	4
Political Science, 1, 4 or 21, 23.....	3

##### *Third Year.*

Economics, 26, 27 (Public Finance, Money and Banking)...	2
Economics 36, 37 (Commercial Geography and International Exchange of Commerce).....	2
French or Spanish.....	3
German.....	3
History (American or English).....	3
Political Science, 21, 23 or 1, 4.....	3

##### *Fourth Year.*

Economics, 33 (Commercial and Maritime Law).....	2
Economics 38, 39 (Business Organization and Domestic Commerce) .....	2
History (English or American).....	3
Political Science, 28 (Political History of South America)...	1½
Political Science 29, 30 (International Law and Elements of Diplomacy).....	3
Political Science 32, 33 (Consular Service and Colonial Administration).....	2
Psychology and Logic.....	3

\*As amended by the Board of Examiners, February 18, 1911.

**COMBINATION SIX-YEAR COURSE FOR DEGREES OF BACHELOR OF ARTS AND BACHELOR OF LAWS**

Regular students in this course will complete three years of work aggregating forty-eight hours in Columbian College, including one of the four groups of prescribed subjects, and will complete in the Law School the three-year course for the degree of Bachelor of Laws. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Law, the student will receive the degree of Bachelor of Arts.

**PRE-MEDICAL COURSES**

To meet the higher preliminary requirements for medical education, Columbian College offers the following courses: A *one-year pre-medical course* satisfying the requirement of the American Medical Association for admission to the Medical School; a *six-year combination course*, consisting of two years in Columbian College and four years in the Medical School for which the degrees of Bachelor of Science in Medicine and Doctor of Medicine are given; and a *seven-year combination course*, consisting of three years in Columbian College and four years in the Medical School, for which the degrees of Bachelor of Arts and Doctor of Medicine are given.

The Medical School of the George Washington University in the classification of the Council of Medical Education is one of the "Class A" medical colleges. Since January 1, 1914, the Medical School in common with all other "Class A" schools in the United States, requires for admission to the freshman class a pre-medical course of one college year consisting of specified subjects.

Students having the requisite *high-school* preparation will find it of special advantage to take this pre-medical course in Columbian College, as upon the completion of the year they can be admitted at once to the Medical School.

The candidate for the study of medicine must present on entrance to Columbian College, in addition to the required subjects one unit of History.

Candidates for the study of medicine should include in the college entrance subject two units of German or French, in order to continue in college the study of the same language and obtain a satisfactory reading knowledge of the language.

This is not indispensable, because the Council of Medical Education states—

"Two units of Greek or Latin may be substituted for the two required units of French or German."

The advice of the Council is, however, as follows:

“If a satisfactory reading knowledge of German or French is to be obtained in the one year of college work, it is essential that an advanced course be offered and that the student have completed as a prerequisite in the high school two units of elementary work in German or French.”

Candidates substantially prepared may be registered in Columbian College as conditioned students, provided the deficiency is such that it can be made up before the end of the one-year pre-medical college course. To enter the Medical School, it is necessary to have satisfied all of the required academic or high-school preparation and, in addition, all of the specified subjects of the one-year pre-medical college course. No conditioned student will be registered in the Medical School.

#### Admission to One-Year Pre-Medical Course

One-year pre-medical students will be admitted on the fourteen-unit entrance requirement of the Council on Medical Education of the American Medical Association as follows:

*Seven Required Units.*—English (Reading and Practice), 2 units; Algebra to quadratics, 1 unit; Plane Geometry, 1 unit; German or French, or Latin or Greek, 2 units; American History and Civil Government, 1 unit (if elementary grade, it must be in addition to the fourteen units).

*Seven Elective Units.*—To be selected from the following: English Mathematics Latin, Greek, German, French, Spanish, Scandinavian, Science with laboratory work, Agriculture, Drawing, Manual Training, Domestic Science, Music.

#### One-Year Pre-Medical Course in Columbian College

Candidates for the one-year pre-medical course for admission to the Medical School should register in Columbian College for the following courses:

Physics 3 (lectures).....	3 hours
Physics 2 (laboratory).....	2 periods
Chemistry 1 (lectures).....	3 hours
Chemistry 2 (laboratory).....	2 periods
Zoölogy 1 and 2 (lectures and laboratory).....	6 periods
German or French (elective).....	3 hours

#### Six-Year Course for the Degrees of Bachelor of Science in Medicine and Doctor of Medicine

Regular students in this course will complete two years of work aggregating at least thirty-six prescribed hours in Columbian College and the four-year course in the Medical School. On the completion of this six-year course, the student will receive at the same time the degrees of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

Biological Sciences:	HOURS
Zoölogy 1.....	3
Botany 1.....	3
Chemistry 1, 2, 23.....	7
English 1 or 2.....	3
German or French or Spanish.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 3 and 2.....	5
Psychology and Logic.....	3
Total.....	36

#### Seven-Year Course for the Degree of Bachelor of Arts and Doctor of Medicine

Regular students in this course will complete at least forty-eight hours as prescribed in Columbian College and the four-year course in the Medical School. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The forty-eight hours of prescribed subjects in Columbian College are as follows:

Biological Sciences:	HOURS
Zoölogy 1 and 2.....	6
Botany 1.....	3
Chemistry 1, 2, 23.....	7
English 1 or 2.....	3
French or Spanish.....	6
German.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 3 and 2.....	5
Psychology and Logic.....	3
Economics, History, or English.....	3
Total.....	48



## SCHEDULE OF SUBJECTS FOR THE FIRST TWO YEARS

	MON.	TUES.	WED.	THURS.	FRI.	SAT.
9.15	Math. 3	English 3	Math. 3	English 3	Math. 3	English 3
10.15	French 3 Math. 9 Phil. 1	English 1 Physics 2	French 3 Math. 9 Phil. 3	English 1 Physics 2	French 3 Math. 9 Phil. 1	English 1
11.15	Econ. 1 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 1 French 1 German 3 Greek 2	German 1 Physics 2	Econ. 1 French 1 German 3 Greek 2	German 1
1.45	German 5 Graphics 1 Latin 2 Physics 3 Spanish 2	Chem. 2 Chem. 3 Chem. 7	German 5 Graphics 1 Latin 2 Physics 3 Spanish 2	Chem. 2	German 5 Latin 2 Physics 3 Spanish 2	
2.45	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 English 5 Chem. 3 Chem. 7	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 English 5	Greek 1 Hist. 1, 2	
3.45	Graphics 1 Hist. 3, 4 Latin 1 Spanish 1	Chem. 2 Chem. 3 Chem. 7	Graphics 1 Hist. 3, 4 Latin 1 Spanish 1	Chem. 2	Hist. 3, 4 Latin 1 Spanish 1	
5.00	English 2 Geology 1 Physics 1 Math. 4 Phil. 2 Zoology 1	Botany 1 Chem. 1 French 4 German 2 Hist. 30 Greek B Political Science 1, 4	English 2 Physics 1 Math. 4 Phil. 4 Zoology 1 Zoology 2	Botany 1 Chem. 1 French 4 German 2 Hist. 30 Greek B Political Science 1, 4	English 2 Geology 1 Phil. 2 Physics 1 Math. 4 Zoology 1 Zoology 2	Botany 1 Chem. 1 French 4 German 2 History 30 Political Science 1, 4
5.50	Econ. 2 English 4 Geology 2 Math. 12 Math. 6 Zoology 2	Chem. 6 French 2 German 4 Hist. 5, 6	Econ. 2 English 4 Math. 12 Math. 6 Zoology 1 Zoology 2	French 2 German 4 Hist. 5, 6	Econ. 2 English 4 Geology 2 Math. 12 Math. 6 Zoology 1 Zoology 2	French 2 German 4

## COLLEGE OF ENGINEERING

### ADMISSION

Candidates for admission to the Freshman Class in the Engineering Courses are required to present fifteen units for admission, distributed as follows:

	UNITS
English.....	3
French or German.....	4
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Chemistry.....	1
Physics.....	1
Electives.....	2
Total.....	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in French and two units in German. Students who present four units in one language will study the other language two years in College. Students who present two units in French and two units in German will study each language one year in College.

Candidates for admission to the Freshman Class in the Architectural Course are required to present fifteen units for admission, distributed as follows:

	UNITS
English.....	3
French or German.....	2
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Electives.....	6
Total.....	15

For detailed descriptions of the requirements in each preparatory subject see pages 52-60.

For admission to advanced standing or as a special student, see page 60.

**COURSES FOR A DEGREE**

Four courses of study are offered:

- I. CIVIL ENGINEERING.
- II. ELECTRICAL ENGINEERING.
- III. MECHANICAL ENGINEERING.
- IV. ARCHITECTURE.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, in Mechanical Engineering, and in Architecture, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above engineering degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

**REQUIREMENTS FOR A DEGREE**

The arrangement of the topics in each of the regular courses for degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of Department Subjects on pages 86-118, to which reference should be made for more complete description.

**COMMON TO ALL ENGINEERING COURSES****Freshman Year**

- Chemistry, 1, 7.
  - General Chemistry and Qualitative Analysis.
- English, 1 or 2.
  - Rhetoric.
- French or German.
- Graphics, 1.
  - Mechanical and Freehand Drawing.
- Mathematics, 9 or 12.
  - Trigonometry; Analytic Geometry.

**CIVIL ENGINEERING COURSE****Sophomore Year**

- Civil Engineering, 1, 3, 4.
  - Surveying; Highway Engineering; Materials of Construction.
- French or German.
- Graphics, 8.
  - Descriptive Geometry.
- Mathematics, 20 or 21.
  - Calculus.
- Physics, 1, 2.
  - General Physics; Laboratory Physics.

**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Chemistry, 6.

Metallurgy.

Civil Engineering, 2, 8, 9, 22.

Railroad Engineering; Practical Astronomy; Testing Laboratory; Theory of Structures.

Electrical Engineering, 6.

Industrial Electricity

Geology, 2.

**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Civil Engineering, 20, 21, 23, 24.

Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.

Economics, 33.

Commercial Law.

**ELECTRICAL ENGINEERING COURSE****Sophomore Year**

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry.

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1.

Mechanism.

Physics, 1, 2.

General Physics; Laboratory Physics.

**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Chemistry, 6.

Metallurgy.

Electrical Engineering, 1, 2, 4, 5.

Elementary Electricity and Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory.

Mechanical Engineering, 20, 21.

Steam Engineering; Boilers.



**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Economics, 33.

Commercial Law.

Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.

Electrical Designs; Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory; Electric Lighting; Electric Railways.

Mechanical Engineering, 10, 23.

Engineering Laboratory; Hydraulic Machinery.

**MECHANICAL ENGINEERING COURSE****Sophomore Year**

French or German.

Graphics, 2, 8.

Advanced Mechanical Drawing; Descriptive Geometry

Mathematics, 20 or 21.

Calculus.

Mechanical Engineering, 1.

Mechanism.

Physics, 1, 2.

General Physics; Laboratory Physics.

**Junior Year**

Applied Mathematics, 20, 22.

Mechanics; Mechanics of Materials.

Civil Engineering, 22.

Theory of Structures.

Mechanical Engineering, 6, 9, 20, 21, 24, 28.

Engineering Drawing; Engineering Laboratory; Steam Engineering; Boilers; Cotton Machinery and Machine Tools; Industrial Management.

**Senior Year**

Applied Mathematics, 21.

Hydraulics.

Chemistry, 6.

Metallurgy.

Civil Engineering, 5, 6.

Surveying Instruments; Foundations.

Economics, 33.

Commercial Law.

Electrical Engineering, 7.

Dynamos and Motors.

Mechanical Engineering, 7, 10, 22, 23, 26, 27.

Machine Design; Engineering Laboratory; Gas Engines;  
Hydraulic Machinery; Dynamics of Machinery; Power Plant  
Design.

### COURSE IN ARCHITECTURE

#### Freshman Year

Architecture, 2, 3, 4.

Free-hand Drawing; Architectural Drawing and Elementary  
Design; Projections, Shades, Shadows and Perspective.

English, 1 or 2.

Rhetoric.

French.

Mathematics, 9 or 12.

Trigonometry; Analytic Geometry.

#### Sophomore Year

Architecture, 5, 6, 8.

Architectural Design; Free-hand Drawing; History of Archi-  
tecture.

English, 3 or 4.

Humanistic Studies.

French.

Geology, 2.

#### Junior Year

Architecture, 20, 21, 22, 24, 25, 33.

History of Architecture; Building Construction; Sanitation;  
Pen and Ink Rendering; Design; Water Color.

Physics, 1 or 3.

General Physics.

#### Senior Year

Archaeology, 20.

History of Art.

Architecture, 27 or 37, 39, 40, 41, 43.

Design; Building Construction; Water Color; Heating and  
Ventilating; Office Practice.

Economics, 33.

Commercial Law.

Electrical Engineering, 26.

Electric Lighting and Illumination.

## TEACHERS COLLEGE

The purpose of Teachers College is to provide (a) collegiate training for teachers, (b) instruction in education as a department of science.

The aims of the Teachers College may be summarized as follows:

- a. To promote the knowledge of educational science.
- b. To fit students for the higher positions in the public school service.
- c. To secure to teaching the rights and prerogatives of a profession.
- d. To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

### ORGANIZATION

In order to combine to the best advantage a general college education with adequate professional training for teaching, Teachers College provides a four years' college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to the professional courses and to specialization in the subjects which the student expects to teach.

Inasmuch as a large number of teachers in service are without college degrees, and a still larger number desire to supplement their professional training by taking special courses, the courses of instruction have been arranged to meet the needs of teachers in service, as well as of undergraduate students. The required courses constituting the prescribed work in education are given both in the morning and in the late afternoon hours, and are, therefore, easily accessible both to students and to teachers from the schools.

### ADMISSION

Candidates for admission to the Freshman Class in Teachers College must meet the general admission requirements (p. 51) of fifteen units. *Three of these must be in English, two and one-half in Mathematics, and two in one of the following languages: Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

Persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as special students on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

Graduates of approved Normal Schools, Training Colleges, or Technical Schools, and teachers of experience who have studied privately, will be admitted to such advanced standing as the courses they have pursued warrant.

For further information concerning admission as special student or to advanced standing, see p. 60.

## GRADUATION

On the completion of courses of study aggregating at least sixty-two hours, the University confers the degree of Bachelor of Arts and a Bachelor's Diploma in Education. (An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year.) These courses are partly prescribed and partly elective, and the degree is conferred when the necessary work is completed, no time limit being set. The prescribed courses are the following:

a. In general culture subjects:

	HOURS
Biology*.....	3
English.....	3
Foreign Language*.....	6
History*.....	6
Psychology and Logic.....	3
Philosophy.....	3

For the subjects marked with an asterisk (\*) electives may be substituted to the extent that approved secondary school work has been done in these subjects. The foreign language requirement must fall in one language, while in history it is required that a survey of the world's history be obtained, and to the extent that this survey has not been obtained before entering college will college work in history be required.

b. In professional subjects ten hours are required of which the following seven are prescribed, although teachers of experience may receive credit for Observation and Practice Teaching.

	HOURS
History of Education.....	2
Principles of Education } Principles of Teaching }	2
School Hygiene.....	1
Observation and Practice Teaching.....	2

In order that the student may receive a thorough grounding in the branches that he wishes to teach, the electives are subject to the following restrictions:

All regular students must complete before graduation at least nine hours in a Major, and at least five hours in a Minor subject, in addition to the first required course, if any, in the same subject.

As a Major, any one of the following subjects, or group of subjects, may be chosen: English, Latin, Greek, French, German, Mathematics, Physical Science, Biological Science, History, Economics and Political Science, Philosophy and Psychology.

As a Minor, choice may be made of any of the other subjects in the same list, or of Education.



### THE TEACHER'S DIPLOMA

The Bachelor's Diploma in Education is granted in connection with the Bachelor of Arts degree upon the fulfillment of the following condition: *a.* The student must have satisfactorily completed the courses of study defined above. *b.* He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

The Diploma is also given in connection with higher degrees, provided a graduate student has taken a major or minor in Education, and has satisfied the requirements *a* and *b* above, or in lieu of *a* has completed equivalent work in another institution.

A student holding a bachelor's degree from an approved college or university may, by satisfying the professional requirements, earn the Diploma without registering for a degree.

### OBSERVATION AND PRACTICE TEACHING

Ample opportunity is afforded for observation and practice teaching by (*a*) attendance upon observation classes conducted by experienced teachers, and (*b*) actual practice in teaching under supervision and criticism.

### EXPERIMENTAL WORK

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the study of methods and other practical educational problems.

### TEACHERS APPOINTMENT BUREAU

Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in Teachers College, or in Columbian College, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers. Communications should be addressed to the "Teachers Appointment Bureau," Teachers College, The George Washington University.

## COURSES OF INSTRUCTION

### PROVIDED BY THE DEPARTMENT OF ARTS AND SCIENCES

Courses of instruction are divided into three sections.

First-section courses may be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degree; they serve, however, with additional work, as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses 20 to 49, inclusive; third-section courses, 50 and upwards. The number of hours, unless otherwise specified, indicate hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry count one-third unit each, in other subjects one-half unit each. Laboratories and drawing-rooms will be open from 9.15 a.m. till 10 p.m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

#### APPLIED MATHEMATICS

See Engineering.

#### ARCHAEOLOGY AND HISTORY OF ART

MITCHELL CARROLL, Ph.D.....	Professor
REBECCA SHERMAN ASHLEY.....	Instructor
EDGAR L. HEWETT, D.Soc.....	Lecturer

#### *Second Section. For Undergraduates and Graduates*

20. *History of Art.*—An introductory course in the history of architecture, sculpture, painting and the minor arts. Illustrated lectures and

conferences. 20a. Greek Art. *Tu.* at 3.45. 20b. Fifteenth Century Italian Art. *Th.* at 3.45. Professor CARROLL and Miss ASHLEY.

21. *Roman, Mediaeval and Modern Art.*—*Tu.* at 5.00. Professor CARROLL.

22. *Sixteenth Century Italian Art.*—*Th.* at 5.00. Miss ASHLEY.

### *Third Section. Primarily for Graduates*

50. *Classical Archaeology.* Topography and Monuments of Athens and Rome. Two hours. Professor CARROLL.

51. *History of Art.*—Important epochs in the development of architecture, sculpture and painting. Two hours. Professor CARROLL assisted by Miss ASHLEY.

52. *American Archaeology.*—In conjunction with the School of American Archaeology in Santa Fe. Dr. HEWETT.

Use is made of the illustrative material in the National Museum, the Library of Congress and the Corcoran Gallery of Art. Students are invited to the open meetings of the Art and Archaeology League of Washington, and the Washington Society of the Archaeological Institute of America.

### ARCHITECTURE

ALBERT BURNLEY BIBB.....	Professor
ALBERT LEWIS HARRIS, B.S. in Arch.....	Assistant Professor
BEDFORD BROWN, B.S.....	Assistant Professor
PHILIP ROGERS HOOTEN.....	Instructor

### *First Section. Primarily for Undergraduates*

2. *Freehand Drawing.*—To be taken at the Corcoran Gallery of Art. Two periods.

3. *Architectural Drawing and Elementary Design.*—This course includes the study of the elements of Architecture including the Five Orders, the use of india ink and water color rendering. At least nine hours per week are to be spent by the student in the drafting room.

Criticisms by Mr. HOOTEN on Monday, Wednesday and Friday evenings.

4. *Projections, Shades, Shadows and Perspective.*—A course in orthographic projections, shades and shadows, followed by a short course in perspective. Two hours.

Criticisms by Mr. HOOTEN on Monday evenings.

5. *Design.*—Problems of an elementary character are given to prepare the student for work in the Class B order of the Society of Beaux-Arts Architects; the rendering of these problems of this Society. At least twelve hours per week are to be spent by the student in the drafting room. Criticisms by Assistant Professor BROWN on Tuesday, Thursday and Saturday evenings.

6. *Freehand Drawing*.—Advanced course. To be taken at the Corcoran Gallery of Art. Two periods.

8. *History of Architecture*.—The course is designed to trace the development of the art in Ancient Egypt, in Greece, and in Rome, and through the early Christian, Byzantine, and Mediaeval periods. *Tu., Th., Sat.*, at 5.00. Professor BIBB.

*Second Section. For Undergraduates and Graduates*

20. *History of Architecture*.—An advanced course offering a critical study of the architecture of the Renaissance in Italy, France and England, and of its effect upon the building arts of our own time. *Tu., Th., Sat.*, at 5:50. Professor BIBB.

21. *Building Construction*.—Frame buildings, details of construction, interior finish, three-fourths scale and full size details. One lecture and three hours in drafting room. Assistant Professor HARRIS.

22. *Sanitation*.—History of sanitation; pollution of water sources; modern plumbing practice; methods of sewage disposal, septic tank, sewage disposal fields, etc. Two lectures a week for one term. Assistant Professor HARRIS.

24. *Pen and Ink Rendering*.—A study of the renderings of the best pen and ink draftsmen with practice in the use of the pen as a means of Architectural expression. One hour.

Hours of criticism selected by conference with Assistant Professor BROWN.

25. *Design*.—Plan problems, sketch problems, and archaeology problems from the Class B Plan programs of the Society of Beaux-Arts Architects. At least fifteen hours a week are to be spent by the student in the drafting room. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

27. *Advanced Design*.—Plan problems and sketch problems are given from the Class A programs of the Society of Beaux-Arts Architects. The latter part of the year is devoted to a thesis, the subject being selected by the student subject to the approval of the Professor of Design. At least eighteen hours a week are to be spent by the student in the drafting room. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

33. *Water Color*.—Drawing in water color from still life models, from architectural interiors, and from buildings and gardens. Two hours. Professor BIBB.

37. *Beaux-Arts Problems*.—In advanced design the student may take the problems under the criticism of Mr. CLARENCE DEAN at the Washington Architectural Club.

39. *Building Construction*.—Masonry foundations, pile foundations, stone work, brick work, fire-proofing, ornamental terra cotta, plastering, specifications. One lecture and three hours in drafting room a week. Assistant Professor HARRIS.



40. *Water Color*.—Advanced course. A continuation of course 33. Two hours. Professor BIBB.

41. *Heating and Ventilating*.—Elementary principles of heating and ventilating; details of installation of hot air, hot water, and steam heating plants. Two lectures for one term. Assistant Professor HARRIS.

43. *Office Practice*.—A course of lectures on office practice, business methods of an Architect and special types of buildings by the teaching staff and practicing Architects of the District of Columbia. One hour.

### ASTRO-PHYSICS

FREDERICK EUGENE FOWLE, JR.....Lecturer

#### *Third Section. Primarily for Graduates*

54. A lecture course on the astro-physical instruments employed in modern research. Mr. FOWLE.

### BIOLOGICAL SCIENCE

PAUL BARTSCH, Ph.D.....Professor  
ALBERT MANN, Ph.D.....Professor  
JULIA THECKLA MACMILLAN, A.M.....Instructor  
GEORGE TRAVER HARRINGTON, B.S. in Agri., B.S. in Chem.....Instructor

### Zoology

#### *First Section. Primarily for Undergraduates*

1. *Systematic Zoology*.—1. Invertebrates. This includes lectures and laboratory work. The lectures cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, *Mon.*, at 5.00; laboratory, *Wed.*, *Fri.*, 5.00-6.40. Professor BARTSCH and Miss MACMILLAN.

2. *Systematic Zoology*.—II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrates, and correlated with these is the study and dissection of typical specimens of each group. Lecture, *Mon.*, at 5.50; laboratory *Wed.*, *Fri.*, 5.00-6.40. Professor BARTSCH and Miss MACMILLAN.

#### *Second Section. For Undergraduates and Graduates*

20. *Practical Zoology*.—A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to ex-

pound the economic side of zoology. Open to all students. One hour. Professor BARTSCH.

23. *Ornithology*.—A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Professor BARTSCH and Miss MACMILLAN.

Laboratory courses in histology and physiology will be arranged for competent students.

### Botany

#### *First Section. Primarily for Undergraduates*

1. *General Botany*.—An introductory course dealing with the fundamental concepts of plant life. Representative members of the different groups of plants will be studied, and lines of evolutionary development will be emphasized. Lecture, *Th.*, at 5.00; laboratory, *Tu.*, and *Sat.*, 5.00–6.40. Mr. HARRINGTON.

#### *Third Section. Primarily for Graduates*

50. Original investigation in (a) Economic Botany, *Materia Medica*, etc.; (b) Parasitism and Monstrosities; (c) Researches in Physiology of single groups; (d) Comparative Organography. Professor MANN.

### BOTANY

See Biological Sciences.

### CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....	Professor
FRANK WIGGLESWORTH CLARKE, Sc.D.....	Professor
NEVIL MONROE HOPKINS, Ph.D.....	Assistant Professor
EDWIN ALLSTON HILL, Ph.D.....	Assistant Professor
THOMAS MALCOLM PRICE, Ph.D.....	Assistant Professor
OTIS DOW SWETT, LL.M., M.S.....	Assistant Professor
HIRAM COLVER MCNIEL, Ph.D.....	Assistant Professor
EDWIN HENRY INGERSOLL, M.S.....	Instructor
HENRY ALBERT LEPPER, B.S.....	Assistant

#### *First Section. Primarily for Undergraduates*

1. *General Chemistry*.—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu.*, *Th.*, *Sat.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

2. *Laboratory Practice*.—A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiment. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

3. *Preparation and Study of the Properties of Chemical Substances*.—A laboratory course. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

4. *Assaying and Metallurgy of the Precious Metals*.—Carried on by the method used by the Government Assayers, the Laboratory being fitted up on the plan of that of the United States Mint. Twelve hours for three months. Professor MUNROE, Assistant Professor SWETT.

5. *Principles of Analysis*.—Lecture. One hour. Professor MUNROE.

6. *Metallurgy of Iron and Steel*.—A course of lectures and readings. *Tu.*, at 6.00. Professor MUNROE.

7. *Qualitative Analysis*.—A brief course intended primarily for students in engineering. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Professor MUNROE, Assistant Professor SWETT.

#### *Second Section. For Undergraduates and Graduates*

20. *Qualitative Analysis*.—A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

21. *Quantitative Analysis*.—A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Professor MUNROE, Assistant Professor PRICE, Assistant Professor SWETT.

23. *Organic Chemistry*.—Advanced course. *Wed., Fri.*, at 4.50. Professor MUNROE, Assistant Professor SWETT.

24. *Organic Chemistry*.—Advanced course. A continuation of Course 23. *Th., Sat.*, at 6.00. Professor MUNROE, Assistant Professor SWETT.

25. *Chemistry of the Carbon Compounds*.—A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Professor MUNROE, Assistant Professor SWETT, Mr. LEPPER.

26. *Physical Chemistry*.—A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. In this course special attention is given to the ionic theory, electro-chemistry, the law of mass action, and the phase rule. Two hours. Assistant Professor McNEIL.

27. *Stereo-Chemistry*.—This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Assistant Professor HILL.

28. *Biochemistry*.—A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Assistant Professor PRICE.

*Third Section. Primarily for Graduates*

50. *Explosive Substances*.—Professor MUNROE.

51. *Analytical Methods*.—Professor MUNROE.

53. *Development of the Theory of the Constitution of the Natural Silicates*.—Professor CLARKE.

55. *Special Researches in Electro-Chemistry*.—Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington which are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p.m., and also the meetings of the Chemical Society of the George Washington University which is a most active and efficient student organization.

# CIVIL ENGINEERING

See Engineering.

# CLASSICAL LANGUAGES AND LITERATURES

CHARLES SIDNEY SMITH, Ph.D.....Professor

## Greek

*First Section. Primarily for Undergraduates*

A. *Elementary Course*.—For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. Three hours. Not given in 1914-15.

B. *Homer: Iliad I-IV*.—For students who have taken Course A and desire to prepare themselves to enter Course 1. *Tu., Th.*, at 5.00.

1. Herodotus (selections); Lysias (selected orations); Euripides (*Alcestis*); Greek prose composition. *Mon., Wed., Fri.*, at 2.45.

2. Xenophon (*Memorabilia*); Thucydides (*Book VII*); Sophocles (*Antigone*). *Mon., Wed., Fri.*, at 11.15.

*Second Section. For Undergraduates and Graduates*

20. Plato (selections, including the *Apology* and *Crito*); Aristophanes (*Clouds* or *Frogs*). Two hours. Not given in 1914-15.

21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections). *Tu., Th.*, at 1.45.



## Latin

*First Section. Primarily for Undergraduates*

1. Livy (Books I and XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. Open to students who have satisfied the admission requirements in elementary and advanced Latin. *Mon., Wed., Fri.*, at 3.45.

2. Cicero and Pliny (selected Letters); Horace (Satires and Epistles); Martial (selections). *Mon., Wed., Fri.*, at 1.45.

*Second Section. For Undergraduates and Graduates*

20. Tacitus (selections); Terence (Phormio); Plautus (Captivi).—*Tu., Th.*, at 11.15.

21. Quintilian, Book X, and Horace, Ars Poetica; Catullus, Tibullus, and Propertius. Two hours. Not given in 1914-15.

22. *Advanced Latin Composition and Reading at Sight.*—Practice in Latin expression and style. *Th.*, at 2.45.

*Third Section. Primarily for Graduates*

The work in this Section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

50. *Vergil and Roman Epic Poetry.*—Not given in 1914-15.

51. *Caesar, and the Roman Historians.*—Two hours.

52. *Cicero, and Roman Oratory.*—Not given in 1914-15.

## ECONOMICS AND SOCIOLOGY

ROBERT RUSS KERN, A.B.....Assistant Professor  
L. RUSSELL ALDEN, A.M.....Assistant Professor  
OSCAR PHELPS AUSTIN, A.M.....Lecturer

*First Section. Primarily for Undergraduates*

1. *General Economics.*—An outline course in the principles of political economy, devoted mainly to the study of production and exchange under present-day conditions, followed by a study of the problems of rent, interest, wages, and profits, and including an examination of competition, private property, and economic programs. *Mon., Wed., Fri.*, at 11.15. Assistant Professor KERN.

2. Parallel with course 20. *Mon., Wed., Fri.*, at 5.50. Assistant Professor KERN.

*Second Section. For Undergraduates and Graduates*

22. *General Sociology*.—An outline course in the principles of sociology, devoted mainly to the study of social origins and the development of existing social institutions, with special attention to social psychology. Two hours, first half-year. *Mon., Fri.*, at 5.00. Assistant Professor KERN.

23. *Modern Social Problems*.—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year. *Mon., Fri.*, at 5.00. Assistant Professor KERN.

24. *The History of Economic Thought*.—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. Given in alternate years. Not given in 1914-15. Assistant Professor KERN.

26. *Public Finance*.—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. Two hours, first half-year. Not given in 1914-15. Assistant Professor KERN.

27. *Money and Banking*.—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. Two hours, second half-year. Not given in 1914-15. Assistant Professor KERN.

28. *Economic Problems*.—An advanced course devoted to a more thorough study of the problems developed in the general course in economics. Research and preparation of papers to be presented to the class for discussion and criticism. Credit for course 20, General Economics, is requisite for admission to this course. *Tu., Th.*, at 5.00. Assistant Professor KERN.

33. *Commercial and Maritime Law*.—An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts, sales, bailments, agency, partnership, negotiable instruments, and common carriers. *Tu., Th.*, at 5.50. Assistant Professor ALDEN.

36. *Political and Commercial Geography*.—The products, industries, and commerce of the various sections and countries of the world; transportation routes; trade centers; ports and principal cities; methods of inter-communication; spheres of influence, political and commercial. First half-year. *Mon., Fri.* at 5.50. Mr. AUSTIN.

37. *The International Exchange of Commerce*.—The exchanges between countries, climatic sections; and between the great producing and manufacturing localities; the staple articles of commerce, their places of production and consumption; manufacturing industries and the distribution of their products; a comparative view of the commercial, economic, and financial conditions in the various sections and countries of the world. Second half-year. *Mon., Fri.* at 5.50. Mr. AUSTIN.

38. *Business Organization*.—The business organizations by which the articles forming national and international commerce are produced, transformed into condition for use and transported to the consumer. The extractive industries—agriculture, mining, forestry. The manufacturing industries. The commercial organizations. The transportation systems. Financing: the methods by which funds are accumulated and supplied. The corporation as a factor in business organization. Second half-year. *Tu., Th.*, at 5.00. Mr. AUSTIN.

39. *Domestic Commerce and Industries of the United States*.—Natural resources; agriculture; mining, manufacturing and other industries of the various sections and states. Transportation and other methods of interchange; distributing centers. Quantities and values of principal products. First half-year. *Tu., Th.* at 5.00. Mr. AUSTIN.

#### *Primarily for Graduates.*

51. *Seminar in Sociology*.—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Assistant Professor KERN.

### EDUCATION

WILLIAM CARL RUEDIGER, Ph.D.....	Professor
WILLARD STANTON SMALL, Ph.D.....	Lecturer
ARTHUR DEERIN CALL, A.M.....	Lecturer
MARIETTA STOCKARD.....	Lecturer

#### *Second Section. For Undergraduates and Graduates*

20a. *Principles of Education*.—A comprehensive course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. First half-year. *Mon., Wed., Fri.*, at 9.15. Professor RUEDIGER.

20b. *Principles of Teaching*. A comprehensive course in the principles underlying the teaching process in its intellectual, emotional and motor phases. Special attention is given to making teaching concrete and meaningful. Second half-year. *Mon., Wed., Fri.*, at 9.15. Professor RUEDIGER

21a. *Principles of Education*.—A brief course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. First half-year. *Mon. and Wed.* at 4.00. Professor RUEDIGER.



21b. *Principles of Teaching*. A brief course in the psychological and logical principles underlying the teaching process. Second half-year. Mon. and Wed., at 4.00. Professor RUEDIGER.

(Courses 20 and 21 should be preceded or accompanied by general psychology. Course 21 is designed especially for teachers in service.)

22. *History of Education*.—A general course in the historical development of educational theory and practice. Sat., 9.15–11.15. Professor RUEDIGER.

23. *Child Study*.—The psychology, physiology, and hygiene of childhood and adolescence, with special reference to the problems of teaching. Kirkpatrick's *Fundamentals of Child Study*, supplemented by lectures, assigned reading, and reports. Prerequisite: General Psychology. Not given in 1914–15. Dr. SMALL.

24. *School Sanitation and Hygiene*.—A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. Sat., 11.15–12.15. Dr. SMALL.

25. *Secondary Education*.—After sketching the meaning and significance of secondary education as revealed by educational theory, by the secondary schools of Germany, France, and England, and by the history of secondary education in America, the course will consider in some detail the educational values, essential content, and methods of teaching the various high school branches. The problems of essential minima, of the connection of the studies with life, and of the development of initiative in the student will be emphasized. Sat., 9.15–11.15. Dr. SMALL.

26. *Elementary Education*.—Theory and Practice. On the theoretical side this course will deal briefly with the general principles involved in self culture, our moral ideal, the state and society, the problem of study, the teaching process, lesson assignment, the recitation, and the art of questioning. The principles developed will be somewhat extensively applied to the teaching of reading, English, American history, geography, arithmetic, and perhaps nature study. Not given in 1914–15. Mr. CALL and Professor RUEDIGER.

(Courses 25 and 26 will be given in alternate years.)

27. *School Administration*.—The public school system: Its development; economic and political relations; organization of administration, financial and educational; problems of administration. Lectures, assigned reading, and reports. Not given in 1914–15. Dr. SMALL.

28. *Experimental Education*.—Not given in 1914–15. Professor RUEDIGER.

29. *Educational Story Telling*.—Study of type stories, adaptation of stories, practical story telling. It is the purpose of the course to de-



velop a basis for the selection and presentation of suitable children's literature, taking into consideration the various stages of the child's development.

Lectures, required reading and reports. Not given in 1914-15. Miss STOCKARD.

30. *Story Telling and Children's Literature*.—Study of Epics—Iliad, Odyssey, and Kalevalla. Retelling, possible dramatization.

Part of the course will be given to a discussion of reading and reading books with a view to supplementing with stories and units of literature. It will be the purpose to work toward a solution of the problem of developing in the child a higher appreciation of the best in literature and a real love of books through his school reading. The course will extend and supplement Course 29 but will be open to all upper class students. *Mon. and Wed.* at 4.00. Miss STOCKARD.

32. *Adolescence*.—A consideration of the psychology of adolescence, with special reference to the problems of secondary education. Lectures, readings, and special topics. *Sat.*, at 9.15. Not given in 1914-15. Dr. SMALL.

33. *Ethical Principles in Education*.—The aim of this course is to promote a deeper professional spirit by stimulating the professional cast of mind. Some of the topics to be studied are: the meaning of ethics; maxims for an ethical code; ethical elements in self-culture; various ethical interpretations of the moral ideal; ethical elements in the advancement of truth; ethics of veracity; the ethics of example; the ethics of charity; ethics and the solution of crime; the ethical value of the state; the ethical interpretation of society; the rise of moral enthusiasm; ethical values in public education. *Tu.*, at 5.00. Mr. CALL.

34. *Observation*.—Observation of experienced teachers, under guidance, in the elementary and secondary schools of the city. The course should normally be taken in the junior year. One hour credit. Professor RUEDIGER.

35. *Practice Teaching*.—Opportunity for practice teaching under supervision and criticism is provided through the courtesy of the public school officials. The course should normally be taken in the senior year. One hour credit. Professor RUEDIGER.

(The students taking courses 34 and 35 will meet together once a week for conference and discussion.)

### *Third Section. Primarily for Graduates*

50. *Seminar in Education*.—The theme for 1914-15 will be problems in educational psychology. The native impulses and capacities of man as a basis for education will be taken up in the first semester and the psychology of learning in the second. The course may be counted either as education or as psychology. Open to qualified undergraduates. *Tu. and Th.*, at 5.00. Professor RUEDIGER.

## ELECTRICAL ENGINEERING

See Engineering.

## ENGINEERING

EDWIN VIVIAN DUNSTAN, C.E.....	Professor
OSCAR ALEXANDER MECHLIN, C.E.....	Professor
FRANK CHARLES STARR, S.B.....	Assistant Professor
CHARLES WARD MORTIMER, M.E.....	Assistant Professor
HAYNER HASKELL GORDON, E.E., Ph.D.....	Instructor
ROBERT WILBUR MORSE, S.B.....	Instructor
MARK RITTENHOUSE WOODWARD, E.E.....	Instructor

## Applied Mathematics

*Second Section. For Undergraduates and Graduates*

20. *Analytical and Applied Mechanics*.—(1) Statics: including the composition, resolution and equilibrium of forces; center of gravity; friction; machines. (2) Kinematics and Kinetics: including rectilinear and curvilinear motion; motion under action of variable forces and in resisting media; constrained and rotary motion; impact; work and energy; moment of inertia. Four hours, first half-year. Professor DUNSTAN.

21. *Hydraulics*.—The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Four hours, first half-year. Professor DUNSTAN.

22. *Mechanics of Materials and Theory of Elasticity*.—Including elastic and ultimate strength and deformation: simple cantilever and continuous beams, columns, torsion; combined stresses; compound columns and beams, including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours, second half-year. Professor DUNSTAN.

## Civil Engineering

*First Section. Primarily for Undergraduates*

1. *Surveying and Mapping*.—This course includes the theory and use of instruments; land, topographic, hydrographic, mining, city, and geodetic surveying; measurement of volumes, projection of maps, etc. The course includes plotting survey notes, topographic symbols, and lettering. Two hours a week. Field work, usually on Saturday. One drawing period a week. Assistant Professor STARR.

2. *Railroad Engineering*.—Railroad curves and earthwork; location of about a mile of railroad; laying out curves; construction of contour maps, profiles, mass diagrams, etc. Two hours a week recitation both terms and one period drawing second term; field work usually on Saturdays. Assistant Professor STARR.

3. *Highways and Pavements*.—Location of highways; construction, improvement and maintenance of roads and pavements; curbs, gutters, sidewalks. Two hours, second term. Professor MECHLIN.

4. *Materials of Construction*.—A study of the properties of stone, brick, cement, concrete, wood, iron, steel, etc., with reference to processes of manufacture. The course is supplemented by a number of practical tests made by the students. Two lectures and one laboratory period during first term. Professor MECHLIN.

5. *Surveying Instruments*.—A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours. Assistant Professor STARR.

6. *Foundations*.—A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours. Professor MECHLIN.

8. *A Course in Practical Astronomy for Civil Engineering Students*.—Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for each being a required part of the course. Two lecture-recitation periods during one term. Assistant Professor STARR.

9. *Mechanical Testing*.—A laboratory course in the investigation of the physical properties of engineering material, including exercises in the use of a 200,000 pound Olson Testing Machine. Eighteen periods of two hours each in the second term.

### *Second Section. For Undergraduates and Graduates*

20. *Masonry Construction*.—A course in the use of cement, brick, stone, and concrete, the design of foundations, retaining walls, dams, bridge piers and arches. Included in this is a short course in stereotomy. Two lectures and two design periods. Professor MECHLIN.

21. *Hydraulic Engineering*.—The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing system; water rights and irrigation law. Four lectures and two design periods, second term. Professor DUNSTAN.

22. *Theory of Structures*.—A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods. Professor DUNSTAN.

23. *Theory of Structures*.—The theory of steel design; the design of a roof truss, of a plate girder and a pin connected bridge truss and a study of the theory and design of suspension, continuous, cantilever, and arch bridges, and the details of steel-mill and office-building construction. Three lectures and two design periods. Professor MECHLIN.



24. *Sanitary Engineering*.—This course treats on the drainage of buildings and lands; the treatment and disposal of sewage and the sewerage of cities and towns; public water supply and methods of water purification. Three lectures and one design period. Professor MECHLIN.

### *Third Section. Primarily for Graduates*

50. *Advanced Masonry*.—A course in the theory and design of reinforced concrete structures. Professor MECHLIN.

51. *Advanced Masonry*.—The theory of retaining walls and arches. Professor MECHLIN.

52. *Testing of Materials*.—This course involves original research upon assigned topics. Professor MECHLIN.

53. *Water-Power Development*.—A comparative study of the principal water-power developments of the United States and Europe. The course consists largely of assigned readings and reports thereon. Professor DUNSTAN.

### **Electrical Engineering**

#### *First Section. Primarily for Undergraduates*

1. *Elementary Mathematical Theory of Electricity and Magnetism*.—Elementary electricity and magnetism is studied with special attention to the needs of engineering students. The phenomena accompanying static electricity are noted. Problems illustrating the theory and having practical application are required to be solved. Two hours. Assistant Professor MORTIMER.

2. *Elements of Electricity; Direct Current Motors and Generators; Design Work*.—Elements of electricity are studied during the first term and especial emphasis is laid upon the principles underlying the flow of currents. During the second term a study is made of direct current generators and motors, covering the laws of the magnetic circuit as applied to the dynamo. The course includes the design of electrical machinery and apparatus. An introductory study of alternating currents is also begun. Numerous problems are assigned throughout the course. Three hours. Assistant Professor MORTIMER.

4. *Electrical Measurements*.—A laboratory course for Juniors. Selected experiments. Foster's Hand-book and special laboratory notes are used for reference. Two three-hour periods, first term. Assistant Professor MORTIMER and Mr. WOODWARD.

5. *Electrical Laboratory*.—Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Two three-hour periods, second term. Assistant Professor MORTIMER and Mr. WOODWARD.

6. *Industrial Electricity*.—A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical



machinery, electrical railways and other applications of electric motors. Two hours, first term. Mr. WOODWARD.

7. *Electrical Engineering*.—A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours. Mr. WOODWARD.

8. *Electrical Design*.—A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One recitation period and one drawing period.

*Second Section. For Undergraduates and Graduates*

21. *Alternating Current Theory and Machinery*.—A course for Seniors in Electrical Engineering, covering the principles of single as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours. Assistant Professor MORTIMER.

22. *Electrical Distribution*.—A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Ferguson's Elements of Electrical Transmission. Two hours. Assistant Professor MORTIMER.

23. *Electrical Applications*.—A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour. Mr. WOODWARD.

24. *Advanced Laboratory Work for Seniors in the Electrical Engineering Course*.—Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's Laboratory and Factory Tests in Electrical Engineering, with Foster's Electrical Engineer's Hand-book for general reference. Two three-hour periods. Assistant Professor MORTIMER.

25. *Inspection of Plants and Industrial Works*.—In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written description submitted by the students.

26. *Electric Lighting and Illumination*.—A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, ar-

rangement of light sources, effect of walls, etc. Two hours. Mr. WOODWARD.

27. *Electric Railways*.—A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours, second term. Assistant Professor MORTIMER.

28. *High Frequency Current*.—A lecture course covering the theory of high frequency and oscillatory currents and their application to wireless telegraphy and telephony. The condenser discharge, the theory of resonance in coupled circuits, and electromagnetic waves will be treated. The design of wireless telegraph and telephone apparatus will also be discussed. The class will meet in the laboratory from time to time to familiarize themselves with the use of wireless apparatus. One period. Dr. GORDON.

Juniors and Seniors in Electrical Engineering are expected to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers.

### *Third Section. Primarily for Graduates*

52. *Advanced Course in the Mathematical Theory of Alternating Currents*.—Assistant Professor MORTIMER.

53. *Advanced Course in Polyphase Currents*.—Assistant Professor MORTIMER.

54. *Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus*.—Assistant Professor MORTIMER.

55. *Advanced Electric Railways*.—A course including a short history of electric railways, calculation of the theoretical curves, study of different systems and examples of modern installations. Philip Dawson's *Electric Traction on Railways* is used as a basis for the course. Assistant Professor MORTIMER.

### **Graphics**

#### *First Section. Primarily for Undergraduates*

1. *Mechanical and Freehand Drawing*.—A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Two three-hour periods. Assistant Professor STARR.

2. *Advanced Mechanical Drawing*.—A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawing; proportioning by empirical formulas. Two three-hour periods. Assistant Professor STARR.

8. *Descriptive Geometry*.—A study of the representation of lines, surfaces, and solids, and of their relations; tangencies, intersections, and

developments; warped surfaces; shades and shadows; original construction problems. Two lectures and one drawing period. Assistant Professor STARR.

### Mechanical Engineering

#### *First Section. Primarily for Undergraduates*

1. *Mechanism*.—A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and twenty-five hours in the second term are devoted to valve gears for steam engines. Three lectures and one drawing period. Mr. MORSE.

6. *Engineering Drawing*.—This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Two three-hour periods. Mr. MORSE.

7. *Machine Design*.—This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are:

The complete design of a horizontal single cylinder gas engine, or the design of a steam boiler, a series of shaft couplings, and a fly wheel.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five hours in the drawing room. Mr. MORSE.

9. *Engineering Laboratory*.—A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. Two three-hour periods, second term. Mr. MORSE and Dr. GORDON.

10. *Engineering Laboratory*.—This course is a completion of Course 9. Two three-hour periods. Mr. MORSE and Dr. GORDON.

#### *Second Section. For Undergraduates and Graduates*

20. This course deals with the principles of thermo-dynamics; the properties of gases and vapors, especially steam, and the flow of steam through nozzles. The application of the above principles is discussed and the simple and compound steam engine and the steam turbine are studied. Three hours, first term. Dr. GORDON.



21. *Boilers and Power Plant Accessories*.—This course is devoted to a study of boilers, condensers, feed pumps, economizers, stokers, and other power-plant accessories. The design of power plants will be discussed. Three hours, second term. Dr. GORDON.

22. *Gas Engines and Compression and Refrigeration Machinery*.—This course deals with the theory and practice concerning the internal combustion motor. During the second half of the term the theories and principles involved in compression machinery and artificial refrigeration will be discussed. Three hours, second term. Dr. GORDON.

23. *Hydraulic Machinery*.—This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two hours, second term. Mr. MORSE.

24. *Cotton Machinery and Machine Tools*.—A study of the mechanisms found in cotton machinery and machine tools. Two hours. Mr. MORSE.

26. *Dynamics of Machines*.—A course including a number of the principal applications of dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of the steam engine. Two hours. Mr. MORSE.

27. *Power-Plant Design*.—This course provides for the design with complete plans and specifications of a power plant of industrial proportions by the student. One lecture-recitation hour and two three-hour drawing periods, first term. Dr. GORDON.

28. *Industrial Management*.—A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the method of superintendence and of compensating labor, the determination of the cost of production, and the effect on costs of different systems of distributing indirect expenses. Two hours, second term. Mr. MORSE.

#### ENGLISH

WILLIAM ALLEN WILBUR, A.M.....	Professor
RICHARD COBB, A.B.....	Assistant Professor
GERTRUDE R. BRIGHAM, A.B.....	Assistant

#### *First Section. Primarily for Undergraduates*

1. *English Rhetoric*.—A study of the principles of self expression through language with practice in composition. Tu., Th., Sat., at 10.15. Professor WILBUR.



2. *English Rhetoric*.—Parallel with Course 1. *Mon., Wed., Fri., at 5.00.* Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English.

3. *Humanistic Studies, 1914-15*.—Ecclesiastical Polity, Book 1; The Prelude; The Federalist. *First half-year.* The Poetry of John Milton. *Second half-year.* *Tu., Th., Sat., at 9.15.* Professor WILBUR.

4. *Humanistic Studies, 1914-15.* The Works of Nathaniel Hawthorne, *First half-year.* The Ring and the Book. *Second half-year.* *Mon., Wed., Fri., at 5.50.* Professor WILBUR.

5. *General Survey of English and American Literature*.—The course gives a brief history of English literature to 1600; from 1600 to 1900 it offers also knowledge of representative authors through prescribed reading. *Tu., Th., at 2.45.* Assistant Professor COBB.

#### *Second Section. For Undergraduates and Graduates*

20. *English Composition*.—*Tu., Th., at 11.15.* Assistant Professor COBB.

22. *Shakespeare*.—The Histories and Comedies. Given 1914-15. *Mon., Wed., Fri., at 9.15.* Professor WILBUR.

23. *Shakespeare*.—The Tragedies. Given 1914-15. *Tu., Th., at 5.00.* Professor WILBUR.

(The Temple edition of Shakespeare is recommended.)

26. *Chief American Poets*.—Studies in Poetry. Not given in 1914-15.

#### *Third Section. Primarily for Graduates*

54. *English Seminar*.—Graduate students engaged in individual research will discuss assigned topics in a seminar of English studies, meeting each week at an appointed time.

### FRENCH

See Romance Languages.

### GEOLOGY AND MINERALOGY

GEORGE PERKINS MERRILL, Ph.D.....Professor

RAY SMITH BASSLER, Ph.D.....Assistant Professor

#### *First Section. Primarily for Undergraduates*

1. *Mineralogy*.—Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be

considered as introductory to the courses in either systematic or economic geology. *Mon., Fri.*, at 5.00. Assistant Professor BASSLER.

2. *Geology*.—Systematic geology; dynamical, structural and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-books: Blackwelder and Barrows' Elements of Geology; Merrill's Rocks, Rock Weathering, and Soils. *Mon., Fri.*, at 5.50. Professor MERRILL and Assistant Professor BASSLER.

### *Second Section. For Undergraduates and Graduates*

20. *Economic Geology*.—[Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Lindgren's Mineral Deposits. Merrill's Stones for Building and Decoration and The Non-Metallic Minerals. Given in alternate years. Professor MERRILL.

21. *Paleontology*.—A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology. Assistant Professor BASSLER.

### *Third Section. Primarily for Graduates*

50. *Advanced Geology and Paleontology*.—The student in this course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject.

## GERMANIC LANGUAGES AND LITERATURE

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor  
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor

### *First Section. Primarily for Undergraduates*

1. *Elementary*.—The essentials of German grammar; translation of prose and poetry; beginning conversation; composition and dictation. This course is open only to beginners, and the work done is equivalent

to that of a two years' course in high schools and academies of good standing. *Tu., Th., Sat.*, at 11.15. Professor SCHOENFELD.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 5.00. Professor SCHMIDT.

3. Selected texts from the best contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued, with special emphasis on syntax, word-formation, and the relationship of German and English; conversation continued. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.*, at 11.15. Professor SCHOENFELD.

4. Parallel with Course 3, except that in the second term scientific German is read. *Tu., Th., Sat.*, at 5.50. Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language: idioms; synonyms; extensive translations of English prose into German; essays; selected advanced prose; classical reading and literature; German history. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.*, at 1.45. Professor SCHOENFELD.

6. Parallel with Course 5, with special reference to advanced students both in the historico-political and the scientific departments. *Tu., Th.*, at 5.00. Professor SCHOENFELD.

#### *Second Section. For Undergraduates and Graduates*

20. *Outline of the History of German Literature and Civilization from the Renaissance and Reformation Period until Goethe's Death*, with special attention to the relation of literature and the other fields of culture—Lectures, extensive readings of the classics; advanced practice in writings, essays. *Mon. Wed., Fri.*, at 10.15. Professor SCHOENFELD.

21. *German Literature of the Classic Period at its Zenith.*—Goethe's and Winckelmann's influence on German art; with special reference to the modern German drama; classical ballad and lyric poetry; renaissance of the German volkslied in the eighteenth and nineteenth centuries. Not given in 1914-15. Professor SCHOENFELD.

22. *The Currents of German Literature from the beginning of the Nineteenth Century until 1870.*—Romanticism; Modern German Drama, with special emphasis on Kleist, Grillparzer, Hebbel; Lyrics and Ballads: Uhland and Heine. *Tu., Th., Sat.*, at 10.15. Professor SCHOENFELD.

#### *Third Section. Primarily for Graduates*

50. *Seminar in the History of Middle High German Literature*, with special reference to the Epic and Lyrical Poetry in the Twelfth and Thirteenth Centuries. Introduction to scientific methods of historical and literary research in the Nibelungenlied and the Gudrunsaaga. Professor SCHOENFELD.

51. *Gothic*.—Introduction to comparative Indo-European Grammar. Two hours. Professor SCHMIDT.

52. *Old High German*.—The development of the German language. Two hours. Professor SCHMIDT.

Only one of the foregoing two courses (51, 52) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page 38.

### GRAPHICS

See Engineering.

### GREEK

See Classical Language.

### HISTORY

CHARLES CLINTON SWISHER, Ph.D., LL.D.....	Professor
LESLIE C. McNEMAR, A.B.....	Assistant Professor
LEVI RUSSELL ALDEN, A.M.....	Assistant Professor

#### *First Section. Primarily for Undergraduates*

1. *Mediaeval History*.—A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions, extending through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

2. *Mediaeval History*.—A history of the evolution of national government extending through the periods of the Renaissance and the Protestant Revolution; texts and assigned readings. Second half-year. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

3. *Modern European History*.—A study of the European States under the new conditions resulting from the discovery of America and the opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures, and collateral readings. First half-year. *Mon., Wed., Fri.*, at 3.45. Professor SWISHER.

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; texts, lectures, and collateral readings. Second half-year. *Mon., Wed., Fri.*, at 3.45. Professor SWISHER.

5. *Mediaeval History*.—Parallel with Course 1. First half-year. *Tue., Th., Sat.*, at 5.50. Professor SWISHER.

6. *Mediaeval History*.—Parallel with Course 2. Second half-year. *Tu., Th., Sat.*, at 5.50. Professor SWISHER.



*Second Section. For Undergraduates and Graduates*

25. *English History*.—A general course dealing primarily with the political, economic, and social development; the growth of the Constitution; the relation of church and state; the domestic, foreign and colonial policies; noting the men and events worthy of consideration in determining the causes and results inherent in this development. Text-book and lectures. First half-year. *Tu., Th., Sat.*, at 11.15. Not given 1914-15; alternates with Political Science 31. Assistant Professor McNEMAR.

30. *American Constitutional History*.—A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues. Lectures, text-books, and collateral readings. *Tu., Th., Sat.*, at 5.00. Professor SWISHER.

33. *Current History*.—A discussion of political questions of the day, with special reference to their origin and historical significance. Lectures throughout the year. *Sat.*, at 11.15. Professor SWISHER.

*Third Section. Primarily for Graduates*

54. *Seminar Work*.—The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the seminars of American and Modern European History.

Undergraduate students qualified by previous historical study, who desire to do intensive work with a view to gaining fuller information upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminars.

## INTERNATIONAL LAW AND DIPLOMACY

See Political Science.

## LATIN

See Classical Languages.

## MATHEMATICS

HOWARD LINCOLN HODGKINS, Ph.D.....	Professor
ASAPH HALL, JR., Ph.D.....	Professor
H. GRANT HODGKINS, A.B.....	Instructor
WILLIAM WRIGHT FRASER, A.B., B.L.....	Lecturer

*First Section. Primarily for Undergraduates*

3. *Solid Geometry; College Algebra; Plane Trigonometry*.—*Mon., Wed., Fri.*, at 9.15. Professor HODGKINS.

4. *Algebra; Plane Trigonometry*.—*Mon., Wed., Fri.*, at 5.00. Mr. HODGKINS.

6. *Solid Geometry; College Algebra; Plane Trigonometry*.—*Mon., Wed., Fri.*, at 5.50. Mr. HODGKINS.

9. *Trigonometry; Analytic Geometry.*—Mon., Wed., Fri., at 10.15. Professor HODGKINS.

12. *Trigonometry; Analytic Geometry.*—Mon., Wed., Fri., at 5.50. Professor HODGKINS.

*Second Section. For Undergraduates and Graduates*

20. *Differential and Integral Calculus; Elements of differential equations.* Tu., Th., Sat., at 5.00. Professor HODGKINS.

21. *Differential and Integral Calculus; Elements of differential equations.* Tu., Th., Sat., at 9.15. Professor HODGKINS.

*Third Section. Primarily for Graduates*

50. *Differential Equations.*—Professor HODGKINS.

58. *Celestial Mechanics.*—Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. Professor HALL.

59. *Vector Analysis.*—This course is designed to give the elements of an analysis based chiefly on the method of the late Professor Gibbs (of Yale), but extended so as to embrace the quaternion idea. Application is made to problems in both Geometry and Physics, including vector calculations applied to alternating currents. Mr. FRASER.

**MECHANICAL ENGINEERING**

See Engineering.

**METEOROLOGY**

WILLIS LUTHER MOORE, D.Sc., LL.D.....Professor  
WILLIAM JACKSON HUMPHREYS, Ph.D.....Professor

*Third Section. Primarily for Graduates*

50. *Applied Meteorology.*—Investigation of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. Professor MOORE.

51. *Meteorological Physics.* This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those wishing to make this their principal study will be assisted in the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Professor HUMPHREYS.

**NAUTICAL SCIENCE**

GEORGE WASHINGTON LITTLEHALES, C.E.....Professor

*First Section. Primarily for Undergraduates*

1. *Nautical Science*.—Navigation; nautical astronomy; nautical almanac; production and use of nautical charts; tides; applications of meteorology, terrestrial magnetism and oceanography to navigation; deviation of the compass in iron and steel ships; theory and use of instruments of navigation. Professor LITTLEHALES.

*Third Section. Primarily for Graduates*

50. *Nautical Science*.—Special study of one or more topics. Conferences, assigned readings, direction of research. Professor LITTLEHALES.

## PHILOSOPHY AND PSYCHOLOGY

WILLIAM CARL RUEDIGER, Ph.D.....Professor  
SHEPHERD IVORY FRANZ, Ph.D.....Professor  
EDWARD ELLIOTT RICHARDSON, Ph.D.....Professor

*First Section. Primarily for Undergraduates*

1. *General Psychology*.—An introductory study of the principal facts and laws of the mental life. *Mon., Fri.*, at 10.15. Professor RUEDIGER.

2. *General Psychology*.—Parallel with Course 1. *Mon., Fri.*, at 5.00. Professor RUEDIGER.

3. *Logic and Theory of Knowledge*.—Principles of deductive and inductive inference, followed by a study of the nature and structure of knowledge, its organization, and its relation to language. *Wed.*, at 10.15. Professor RUEDIGER.

4. *Logic and Theory of Knowledge*.—Parallel with Course 3. *Wed.*, at 5.00. Professor RUEDIGER.

(Courses 1 and 3, or 2 and 4 are planned to be taken together, but may be taken separately and are intended to satisfy the requirements in Psychology and Logic of Groups I to IV (pp. 69-70). They are introductory to the remaining courses in Philosophy and Education, and should be taken in the Sophomore year by students intending to pursue advanced courses or courses in Education.)

*Second Section. For Undergraduates and Graduates*

20. *History of Philosophy*.—The more important epochs in the history of thought. Attention is directed to the relation of these distinctive periods to the course of the world's progress. First half-year. *Tu., Th., Sat.*, at 10.15. Professor RICHARDSON.

21. *Ethics*.—A historical and theoretical course, with the aim of acquainting the student with the principal ethical theories. Reference is made to the application of these theories to concrete conditions. Second half-year. *Tu., Th., Sat.*, at 10.15. Professor RICHARDSON.

24. *History of Philosophy*.—The development of philosophy, its nature and problems. This course while introductory is designed to be comprehensive and to give the student a general survey of the philosophic field. *Tu., Th.*, at 5.00. Professor RICHARDSON.

25. *Experimental Psychology*.—An introductory laboratory course. Experiments on sensation, movement, effects of practice, memory and association, emotional manifestations, etc. This course may be taken parallel with Course 1 or 2. To be taken by graduate students who have not had experimental psychology and who are taking a major or minor in psychology. *Th.* 4–5.50. One hour credit. Professor RUEDIGER.

27. *Recent Philosophical Movements*.—A consideration of the various philosophical movements and tendencies of the immediate past. A critical study of the occasion and meaning of the trend of thought at the present time. Lectures and reading of recent books and periodicals. Not given in 1914–15. Professor RICHARDSON.

28. *Philosophy of Nature*.—A critical examination of the concepts of physical science. An investigation of the significance of scientific laws and theories. *Wed.* at 5.00. Professor RICHARDSON.

(Courses 27 and 28 are given in alternate years)

29. *Problems of Philosophy*.—An advanced course dealing with philosophical questions from the standpoint of the questions themselves rather than as these have been presented historically. A critical and constructive examination of fundamental philosophic principles and problems. Lectures, readings and reports. Second half-year. Two hours. Time to be arranged. Professor RICHARDSON.

### *Third Section. Primarily for Graduates*

50. *Seminar in Psychology*.—During the year 1914–15 this course will be combined with Education 50. Professor RUEDIGER.

51. *Metaphysics*.—The principles of metaphysics and the problems of philosophy. An advanced course tracing the origin and development of metaphysical questions, and a critical examination of the attempted solution of these problems. Readings, conferences and written reports. Professor RICHARDSON.

52. *Advanced Experimental, Abnormal or Physiological Psychology*.—Course to be altered in different years in accordance with the needs of students. Prerequisite—courses in general psychology, and introductory experimental psychology. Conferences, reading of recent literature, and demonstrations. Professor FRANZ.

53. *Research in Psychology*. Advanced students, who select psychology as major or minor for the degree of A.M. or Ph.D., will be given special topics for investigation in abnormal, physiological or experimental psychology. To be preceded or accompanied by Course 52 or its equivalent. Professor FRANZ.



## PHYSICS

HOWARD LINCOLN HODGKINS, Ph.D.....	Professor
HAYNER HASKELL GORDON, Ph.D.....	Instructor
CHARLES EDWIN VAN ORSTRAND, S.M.....	Lecturer
HARVEY LINCOLN CURTIS, Ph.D.....	Lecturer
LOUIS COHEN, B.S.....	Lecturer

*First Section. Primarily for Undergraduates*

1. *General Physics*.—A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has had a college course in trigonometry. *Mon., Wed., Fri.*, at 5.00. Professor HODGKINS.

2. *Laboratory Physics*.—A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.*, at 10.15 or *Tu., Th.*, at 7.30. Professor HODGKINS and Dr. GORDON.

3. *Introductory General Physics*.—A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.*, at 1.45. Professor HODGKINS.

*Second Section. For Undergraduates and Graduates*

21. *Heat*.—A lecture and laboratory course, based on Preston's Theory of Heat and Poynting and Thomson's Heat. Three periods. Not given in 1914-15.

22. *Light*.—A lecture and laboratory course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three periods. Not given in 1914-15.

*Third Section. Primarily for Graduates*

56. *Electricity*.—Theory of electric oscillations, with applications to wireless telegraphy and telephony. Mr. COHEN.

57. *Kinetic Theory*.—The physical properties of gases discussed from the standpoint of general dynamics. Free path phenomena including viscosity, diffusion, heat conduction, and molecular aggregation and dissociation. Jean's Dynamical Theory of Gases. A lecture and seminar course. *Mon.*, at 4.50. Mr. VAN ORSTRAND.

58. *Elasticity*.—The physical properties of solids as applied to problems in geophysics. The theories of homogeneous stress and strain. Potential energy of strained solids. Transmission of force. Propagation of earthquake waves. Love's Mathematical Theory of Elasticity.

A lecture and seminar course. *Mon.*, 4.50. Not given in 1914-15. Mr. VAN ORSTRAND.

59. *Theoretical Electricity*.—A lecture course on the Mathematical theory of Electricity, using J. J. Thomson's Elements of Electricity

and Magnetism as a basis. The fundamental propositions of electrical theory are discussed, and their applications to practical problems are pointed out. The solution of a number of problems is also required. Dr. CURTIS.

#### POLITICAL SCIENCE

CHARLES HERBERT STOCKTON, LL.D.....In charge of Department  
LESLIE CLEVELAND McNEMAR, A.B.....Assistant Professor  
OSCAR PHELPS AUSTIN, A.M.....Lecturer

#### *First Section. Primarily for Undergraduates*

1. *Elements of Political Science.*—An elementary course designed to familiarize the student with the nature and scope of politics as a science; the origin, nature and functions of the state; the distinction between sovereignty and government; the distribution of powers, and particularly the relation of the individual to the state and the attendant obligations of citizenship. Recommended as a prerequisite to the succeeding courses. Text-book and lectures. First half-year. *Tu., Th., Sat.*, at 5.00. Assistant Professor McNEMAR.

2. *European Governments.*—A comparative study of the political organization of the principal states of Europe, involving a classification of the state, and the nature of its government on the basis of the source of power; further, an examination of the relation of the executive, legislative and judiciary departments, to each other, and the nature of the party system in each. Text-book and lectures. Second half-year. *Tu., Th., Sat.*, at 5.00. Alternates with Pol. Sci. 4. (Not given in 1914-15.) Assistant Professor McNEMAR.

4. *Political Parties and Party Problems in the United States.*—A study of the organization and methods of action; growth of the party system; primary and convention system; permanent party organization; elements of cohesion in parties; reform movements and measures; theories of the party system. Text-book, assigned readings and lectures. Second half-year. *Tu., Th., Sat.*, at 5.00. Alternates with Pol. Sci. 2. (Given in 1914-15.) Assistant Professor McNEMAR.

#### *Second Section. For Undergraduates and Graduates*

21. *American Government.* A study of the governmental system of the United States; origin, adoption, and growth of the federal Constitution; the relation of the Federal to the State governments, and their organization; the basis of suffrage, influence of public opinion, and political parties. Recommended as a prerequisite to the succeeding courses. Text-book, lectures, and assigned readings. First half-year. *Tu., Th., Sat.*, at 10.15. Assistant Professor McNEMAR.

22. *Federal Government.*—A study of the political problems involved in the organization of the federal government under the present Constitution, including foreign relations, concentration of power, cen-

tralization or responsibility, relation of the executive, legislative and judiciary departments, and the importance of their subdivisions. Text-book, lectures, and assigned readings. Second half year. *Tu., Th., Sat.*, at 10.15. Alternates with Pol. Sci. 23. (Not given in 1914-15.) Assistant Professor McNEMAR.

23. *Municipal Government in the United States*.—A study of the relation of the city to the state and the nation, including the source of power, their organization and administration; the problems arising from rapid growth, powers and liabilities, their influence upon politics, and the necessity for scientific administration as economic units. Text, lectures, and assigned readings. Second half-year. *Tu., Th., Sat.*, at 10.15. Alternates with Pol. Sci. 22. (Given in 1914-15.) Assistant Professor McNEMAR.

27. *Political History of Modern Europe, 1850 to the Present*.—A concise study of the *political* development of the principal European states dealing primarily with the causes and effects involved in the struggle for national unity, with special attention to political organization, the forms of government, and the policies of larger European interest such as colonization and international relations in South America, Asia, and Africa. Text-book and lectures. Second half-year. *Tu., Th.*, at 11.15. Alternates with Pol. Sci. 28. (Not given in 1914-15.) Assistant Professor McNEMAR.

28. *Political History of South America, 1810 to the Present*.—A general study of the *political* development of the States of South America, individually and collectively, dealing primarily with the causes and effects involved in their struggle for national, economic, social and political development, with special attention to the questions of foreign relations. Text-book and lectures. Second half-year. *Tu., Th., Sat.*, at 11.15. Alternates with Pol. Sci. 27. (Given in 1914-15.) Assistant Professor McNEMAR.

29. *Principles of International Law*.—A concise study of the nature, sources and sanctions of International Law. The laws of peace deal with the origin, classification, and essential rights and duties of states but not diplomatic relations; the laws of war deal with the sources and general relations between belligerents together with the rights and duties of neutrals. Lectures, text, assigned cases and additional readings and papers on selected topics. First half-year. *Mon., Wed., Fri.*, at 5.00. Lectures and assigned readings, President STOCKTON, *Wed.* at 5.00; supplemented by seminar and case instruction, Assistant Professor McNEMAR, *Mon., Fri.*, at 5.00.

30. *Elements of Diplomacy and Diplomatic Usage*.—A thorough study of the general principles of diplomatic usage; the history and organization of the Department of State; the rights, privileges and immunities of diplomatic and consular officers; the preliminaries, drafting, signing, and ratification of treaties, and an investigation of other amicable means for settling International Differences. Lectures, text, assigned cases and additional readings and papers on selected topics. Second



half-year. *Mon., Wed., Fri.*, at 5.00. Lectures and assigned readings, President STOCKTON, *Wed.*, 5.00; supplemented by seminary and case instruction, Assistant Professor McNEMAR, *Mon., Fri.*, at 5.00.

31. *Government of England*.—A detailed study of the English governmental system compared with the presidential system of the United States. The organization, functions and procedure, of the crown and the ministry, parliament (particularly the House of Commons), political parties, the judiciary, and local government will be clearly shown. Text and assigned reading. First half-year. *Tu., Th., Sat.*, at 11.15. (Co-ordinating with History 25.) Assistant Professor McNEMAR.

32. *The Consular Service*.—The history and development of the Consular Service of the United States; its present organization; the rights, duties, and methods of procedure of consular officers; the consular conventions of the United States; comparative study of modern consular establishments. First half-year. *Tu., Th.*, at 5.50. Mr. AUSTIN.

33. *Colonial Administration*.—A study of the executive, legislative, and judicial organization and the administration of laws in existing colonies; and investigation of the industries, labor, and education in these colonies. The organization and administration of the insular possessions of the United States. Second half-year. *Tu., Th.*, at 5.50. Mr. AUSTIN.

### *Third Section. Primarily for Graduates*

54. *Conflict of Laws or Private International Law*.—A course dealing with private law in its international aspects. Among the topics treated are marriage and divorce, guardianship, wills, and the administration of estates, bankruptcy, and foreign judgments. Open only to students who have had instruction in the fundamental subjects of American Law. Two hours. Professor GREGORY.

56. *Seminar in Political Science*.—Students competent to undertake advanced work are admitted to this seminar for the presentation and discussion of essays and topics belonging to the field of political science. Hours and credit to be arranged for the work each half year. Assistant Professor McNEMAR.

### PREVENTIVE MEDICINE

GEORGE MILLER STERNBERG, M.D., LL.D. .... Professor

### *Third Section. Primarily for Graduates*

50. A seminar course dealing with vital statistics; etiology and prevention of infectious diseases; causes and prevention of infant mortality; prevention of disease of occupation; protective inoculations; municipal hygiene; national and interstate preventive measures. Professor STERNBERG.



## ROMANCE LANGUAGES AND LITERATURES

GEORGE NEELY HENNING, A.M.....	Professor
EDWARD CULLOM, A.M.....	Instructor in French
WALTON COLCORD JOHN, A.B.....	Instructor in Spanish

## French

*First Section. Primarily for Undergraduates*

1. *Grammar, Composition, Drill in Pronunciation*.—Fraser and Squair's French Grammar. Translation and reading of nineteenth century fiction and history. (400–500 pages.) For beginners. *Mon., Wed., Fri.*, at 11.15. Professor HENNING.

2. Parallel with Course 1. Fraser and Squair's French Grammar. *Tu., Th. Sat.*, at 5.50. Professor HENNING.

3. *Translation, Reading, Grammar, Composition*.—Fraser and Squair's French Grammar. First text, Feuillet, "le Roman d' un jeune homme pauvre" (Heath); other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Mon., Wed., Fri.*, at 10.15. Professor HENNING.

4. Parallel with Course 3. Fraser and Squair's French Grammar. First text, Feuillet, "le Roman d' un jeune homme pauvre" (Heath); other texts to be announced. *Tu., Th., Sat.*, at 5. Professor HENNING.

6. *General Survey of French Literature, Nineteenth to Seventeenth Centuries*.—Translation, collateral reading and reports thereon, lectures on literature and the history of the language, composition. Open to students who have passed in Course 3 or 4, or have fulfilled the admission requirements in Advanced French. *Mon., Wed., Fri.*, at 3.45. Professor HENNING.

*Second Section. For Undergraduates and Graduates*

Courses in this group are open to students who have passed in Course 6, or who otherwise satisfy the instructor of their fitness to take them.

21. *Seventeenth Century Literature*.—History, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Descartes, Pascal, La Rochefoucauld, La Bruyère, Boileau, Saint-Simon, Mme de Sévigné, Bossuet, Corneille, Racine, Molière, Fénelon, Malherbe, La Fontaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Not given in 1914–15.

26. *Literature of the First Half of the Nineteenth Century*.—History, criticism, travels, fiction, drama, lyric poetry. Balzac, Baudelaire, Chateaubriand, Gautier, Hugo, Lamartine, Michelet, Musset, Sainte-Beuve, George Sand, Thierry, Vigny, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Not given in 1914–15. Professor HENNING.

28. *Literature of the Second Half of the Nineteenth Century*.—History, philosophy, criticism, fiction, drama, lyric poetry. Augier, Brunetière, Daudet, Dumas fils, Flaubert, France, Heredia, Leconte de Lisle, Lemaitre, Loti, Maiterlinck, Renan, Rostand, Sully Prudhomme, Taine, Verlaine, etc. Translation, collateral reading and reports thereon, lectures on literature and history. *Mon., Wed., Fri.*, at 2.45.

*Third Section. Primarily for Graduates*

57. *The Comedies of Molière*.—Professor HENNING.

60. *The Romantic Movement in France, with some reference to the same movement in England and Germany*. Professor HENNING.

Other courses may be arranged for competent graduates.

**Spanish**

*First Section. Primarily for Undergraduates*

1. *Grammar, Composition*.—Hills and Ford's Spanish Grammar. Translations and reading of nineteenth century fiction and drama. Open to first-year students only by permission of the instructor. *Mon., Wed., Fri.*, at 3.45. Mr. JOHN.

2. *Translation of Modern Prose and Poetry*.—With much collateral reading. *Mon., Wed., Fri.*, at 1.45. Mr. JOHN.

(A second section of this course will be given on *Tues. and Thurs.* at 5.00 if elected by a sufficient number of students.)

# PROFESSIONAL DEPARTMENTS

## LAW SCHOOL

### FACULTY

CHARLES HERBERT STOCKTON, LL.D.....	President of the University
CHARLES NOBLE GREGORY, A.M., LL.D.....	Dean and Professor of Law
MELVILLE CHURCH, LL.M.....	Professor of the Law of Patents
WALTER COLLINS CLEPHANE, LL.M.....	Professor of Law
EDWIN CHARLES BRANDENBURG, LL.M.....	Professor of Law
ARTHUR PETER, LL.B.....	Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....	Professor of Law
WENDELL PHILLIPS STAFFORD, A.M., LL.D.....	Professor of Law
EVERETT FRASER, A.B., LL.B.....	Professor of Law
JOHN WILMER LATIMER, LL.B.....	Professor of Law
HENRY CRAIG JONES, A.B., LL.B.....	Assistant Professor of Law
MERTON LEROY FERSON, A.M., LL.B.....	Assistant Professor of Law
LOYD HALL SUTTON, S.B., LL.B.....	Instructor in Patent Law
ALFRED BUHRMAN.....	Clerk of the Moot Court
WILLIAM CABELL VAN VLECK, A.B., LL.B.,	Secretary of the Law School and Instructor in Law

### COURT OF APPEALS

WILLIAM F. MATTINGLY, LL.D.....	Chief Justice
JOHN BELL LARNER, LL.D.....	Associate Justice
STANTON JUDKINS PEELLE, LL.D.....	Associate Justice

### LIBRARY

ULYSSES WAYNE WRIGHT, A.B.....	Assistant Librarian
NEAL BRADFORD SPAHR, A.B.....	Assistant Librarian

### GENERAL STATEMENT

The Law School, established in 1865, is the oldest school of law in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring but two years, was in 1898, in accordance with the recommendation of the American Bar Association, increased to three years. Since 1903 most of the important topics of substantive law have been in charge of professional law teachers giving their whole time to the work of legal instruction. Those branches of the law connected with practice are in charge of professors who are actively engaged in the administration of the law either at the bar or on the bench.

In 1877 a year of graduate work, leading to the degree of Master of Laws, was added to the course of instruction offered. A special course in Patent Law was added in 1895 and has been doubled in the present year.

In 1900 the Law School was one of the group of law schools which organized the Association of American Law Schools, and it has remained a member of this Association since that time. This Association includes forty-three of the best and most progressive law schools of the country and is committed to the policy of advancement in legal education.

#### THE ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW

To students of law, the peculiar advantages of Washington are manifest. The Supreme Court of the United States is in session during practically the entire school year. Students have the rare opportunity of hearing the arguments presented by leading American lawyers and the decisions of this high tribunal, which are delivered orally each Monday, upon the important legal questions which come before that court for final determination. Congress is in session during the winter, and here students see the practical workings of the largest and most important law-making body. The Department of Justice, the legal branch of the Federal Government, is also located in Washington. Besides the above there are also the United States Court of Claims, the United States Court of Customs Appeals, and the various local courts of the District of Columbia. The last-named courts exercise the unusual dual function of State and Federal courts. By means of attendance upon these courts students may familiarize themselves with all branches of legal procedure.

#### HOURS FOR LECTURES

The hours of instruction are 7.50-8.40 a.m., 9.00 a.m.-12.00 m., and 4.50-6.30 p.m. Many of the courses are duplicated, so that a student may, if he so desires, confine his work largely either to the forenoon or to the afternoon. Students who desire, or are compelled by circumstances, to support themselves by employment in the Government Service or elsewhere, or who desire to obtain practical experience in an attorney's office in addition to their work in law school, will find this arrangement of hours especially desirable. Such students may complete the full course for the degree, confining their attendance entirely from 4.50-6.30 p.m., or attending partly from 7.50-8.40 a.m. and partly from 4.50-6.30 p.m.

#### LOCATION

The Law School occupies the entire fifth and sixth floors of the New Masonic Temple, corner of New York Avenue, Thirteenth and H Streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious class rooms, moot court rooms, offices, the law library, and a students room.



## ACADEMIC YEAR

The academic year extends through more than eight months, beginning on the last Wednesday in September and ending on the Wednesday following the Wednesday nearest the first day of June, and is divided into two half-years, the second half-year beginning in 1914-15 on Monday, February 1. The session of 1914-15 begins on Wednesday, September 30, and closes Wednesday, June 9. Courses are so arranged that it is possible for a student to enter at the beginning of the second semester of any year and be graduated three years from that time, receiving his degree at the Winter Convocation, held on or about February 22 of each year.

Students may register at any time during the year. Those who register later than three weeks after the opening of the semester, shall be restricted to registration for such work only as in the opinion of the proper committee of the faculty they can successfully carry.

Students who apply for registration not later than two months from the close of registration or students absent for unavoidable cause for not exceeding two months may remove the condition in attendance by study for a period of one and one-half times the period of the absence, under a practitioner during such time as the Law School is not in session, proof thereof to be made by affidavit of the practitioner.

## ADMISSION

1. *For the Degree of Bachelor of Laws.*—Applicants for admission as candidates for the degree of Bachelor of Laws must be at least eighteen years of age and must, in conformity with the requirements of the Association of American Law Schools, of which this school is a member, have either of the following qualifications: (1) They must have completed a four years course in an approved high school. (2) They must have educational training sufficient to satisfy the entrance requirements of Columbian College of the University. In order to satisfy the latter requirements, students must present credits aggregating 15 units, which are broadly equivalent to a four years high school course. A unit represents approximately one year's study in a subject in a preparatory or high school. The fifteen units must include English 3 units, Mathematics  $2\frac{1}{2}$  units, and 2 units of one of the following languages: Latin, Greek, French, German or Spanish. The remaining  $7\frac{1}{2}$  units are elective. Units may be satisfied in general as follows:

English, 3 units

Requirements recommended by the Conference on Uniform Entrance Requirements in English, February 22, 1909, in Grammar, Composition and Literature.

Latin

Elementary, 2 units

Grammar and Composition

Caesar

Greek

Elementary, 2 units

Grammar and Composition

Xenophon

Advanced, 2 units	Advanced, 1 unit
Cæsar	Homer
Virgil	
Prose Composition	
French	Mathematics
Elementary, 2 units	Algebra
Advanced, 2 units	Elementary, 1 unit
	Intermediate, $\frac{1}{2}$ unit
Spanish	Advanced, $\frac{1}{2}$ unit
Elementary, 2 units	Plane Geometry, 1 unit
	Solid Geometry, $\frac{1}{2}$ unit
German	Plane Trigonometry, $\frac{1}{2}$
Elementary, 2 units	unit
Advanced, 2 units	
History	Physics, 1 unit
Ancient, 1 unit	Recitations and Labora-
Greek and Roman	tory work
Mediaeval and Modern	
European, 1 unit	Chemistry, 1 unit
English, 1 unit	Recitations and Labora-
American and Civil Gov-	tory work
ernment, 1 unit	

Other subjects which will be accepted on the basis of one unit for a year's work are botany, zoology, physiology, physiography, political economy and other accredited high school subjects.

Manual Training High School	Bookkeeping, 2 units
Subjects:	Business Organization, 1
Shopwork, not exceeding	unit
2 units	Commercial Law, 1 unit
Domestic Science, not ex-	Government and Indus-
ceeding 2 units	trial Problems, $\frac{1}{2}$ unit
Domestic Arts, not ex-	Commercial History, $\frac{1}{2}$
ceeding 2 units	unit
Business High School Subjects:	Commercial and Physical
Accounting and Finance,	Geography, $\frac{1}{2}$ unit
1 unit	

Applicants for admission on certificate should secure formal certificates setting forth the credits claimed, and present these certificates attached to their application forms. All applications for admission should be addressed to the Secretary of the Law School, who will, upon request, furnish proper blanks and detailed information as to entrance examinations.

2. *For the Degree of Master of Laws or Master of Patent Law.*—Candidates for these degrees must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools, of which this school is a member.

3. *Special Students.*—Persons who can not qualify as candidates for a degree but are over twenty-one years of age and have had such educational training and practical experience as should enable them to pursue satisfactorily the study of law, may be admitted as special students by consent of the Dean.

#### ADVANCED STANDING

Students may be admitted to advanced standing in the second or third year classes upon satisfying the requirements for the work of the preceding year or years. These requirements may be met by presenting a certificate from any law school of accredited standing showing that the student has successfully completed equivalent courses, or by passing the regular examinations set for that purpose at the beginning of the term, after the student has shown that he has pursued a course of study in a law school in the subjects upon which he is examined, covering at least as many hours as are required for such subjects in this University. No credit is given for study pursued in a law office, except as explained above under the statement as to the Academic Year.

All examinations that may be required of applicants for advanced standing are held during the first week of each session.

#### CREDIT GIVEN BY OTHER SCHOOLS FOR WORK DONE

Because of the fact that the Law School is a member of the Association of American Law Schools the work certified by it is given a maximum of credit by the other law schools of the country both as to time and, as far as the authorities of this school have been able to ascertain, as to subjects. This enables students who, for any reason, are unable to complete their work in Washington to continue it at other institutions with a minimum loss of time and work.

#### METHOD OF INSTRUCTION

Instruction in subjects of substantive law is based mainly upon the study and discussion of cases.

In the discussions in the class room every effort is made to lead the student to a clear understanding of fundamental legal principles and to afford him scientific training in the best method of study and legal reasoning.

These courses are given mainly by members of the law faculty who give their entire time to the Law School and are in daily attendance.

Subjects involving the adjective law are taught by lectures, study of text-books and cases, and by practical work in pleading, drafting and

the trial of moot cases. These courses are in charge of experienced members of the bar in active practice.

#### COMBINED SIX-YEAR COURSE FOR THE DEGREES OF BACHELOR OF ARTS AND BACHELOR OF LAWS

Regular students in this course will complete three years of work aggregating forty-five hours in Columbian College, including one of the four groups of prescribed subjects, and will complete in the Law School the three-year course for the degree of Bachelor of Laws. On the completion of the prescribed forty-five hours of work in Columbian College and the first year of the regular course in Law, the student will receive the degree of Bachelor of Arts.

#### COURSES OF INSTRUCTION

##### A. Leading to the Degree of Bachelor of Laws

The course of instruction leading to the degree of Bachelor of Laws extends through a period of at least three years. An average of twelve hours class work per week for three years is required of all candidates for this degree.

Students devoting their whole time to the study of law may, with the permission of the Dean, select additional subjects from the second and third years, provided the aggregate of the hours taken does not exceed fifteen a week. Such excess credits may be applied toward the degree of Master of Laws or of Master of Patent Law.

Students not devoting their whole time to the study of law are urged to devote more than three years to the completion of the course. Many students find it more satisfactory to do so. In case of unsatisfactory work students are required so to extend the period of study.

#### FIRST YEAR SUBJECTS

##### *First Semester*

*\*Contracts (A).*—Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

*\*Criminal Law and Procedure.*—Professor EARNEST. Three hours a week. Clark's Criminal Law and Mikell's Cases on Criminal Law. Clark's Criminal Procedure and selected cases.

*\*Personal Property.*—Mr. VAN VLECK. Two hours a week. Gray's Cases on Property, Volume I.

*\*Real Property I. (A).*—Professor FRASER. Two hours a week. Gray's Cases on Property, Volume I.

*\*Torts (A).*—Assistant Professor JONES. Two hours a week. Ames and Smith's Cases on Torts. Volume I, Third Edition; Volume II, Second Edition.

##### *Second Semester*

*Agency.*—Assistant Professor FERSON. Three hours a week. Wambaugh's Cases on Agency.

\* Required Subjects.



\**Contracts* (B).—Professor GREGORY. Three hours a week. Williston's Cases on Contracts.

*Domestic Relations*.—Mr. VAN VLECK. Two hours a week. Case book to be announced.

\**Real Property* I (B).—Professor FRASER. Two hours a week. Gray's Cases on Property, Volumes I and II.

\**Torts*. (B).—Assistant Professor JONES. Two hours a week. Ames and Smith's Cases on Torts. Volume I, Third Edition; Volume II, Second Edition.

## SECOND YEAR SUBJECTS

### *First Semester*

\**Common Law Pleading and Practice*.—Professor CLEPHANE. Two hours a week. Tyler's Stephen on Pleading.

\**Equity*. (A).—Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

\**Evidence* (A).—Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

\**Real Property* II (A).—Professor FRASER. Three hours a week. Gray's Cases on Property, Volumes II and III.

*Sales*.—Assistant Professor FERNON. Three hours a week. Williston's Cases on Sales. Second Edition.

### *Second Semester*

*Brief Making*.—Professor LATIMER. One hour a week.

*Damages*.—Assistant Professor JONES. Two hours a week. Beale's Cases on Damages. (Not given in 1914-15 and in alternate years thereafter.)

\**Equity* (B).—Professor STAFFORD. Two hours a week. Ames' Cases on Equity Jurisdiction.

*Equity Pleading and Practice*.—Professor CLEPHANE. One hour a week. Rush on Equity Pleading and Practice. Rush's Cases on Equity Pleading and Practice.

\**Evidence* (B).—Professor PETER. Two hours a week. McKelvey on Evidence and Thayer's Cases on Evidence.

*Insurance*.—Assistant Professor JONES. Two hours a week. Wambaugh's Cases on Insurance. (Not given in 1914-15 and in alternate years thereafter.)

*Municipal Corporations*.—Assistant Professor JONES. Two hours a week. Beale's Cases on Municipal Corporations. (Given in 1914-15 and in alternate years thereafter.)

*Partnership*.—Mr. VAN VLECK. Two hours a week. Gilmore's Cases on Partnership. (Given in 1914-15 and in alternate years thereafter.)

*Real Property* II (B).—Professor FRASER. Three hours a week. Gray's Cases on Property, Volume V.

• *Required Subjects.*

*Quasi-Contracts*.—Mr. VAN VLECK. Two hours a week. Scott's Cases on Quasi-Contracts. (Not given in 1914-15 and in alternate years thereafter.)

### THIRD YEAR SUBJECTS

#### *First Semester*

*Bankruptcy*.—Professor BRANDENBURG. One hour a week.

\**Bills and Notes*.—Assistant Professor FERSON. Three hours a week. Hufcutt's Negotiable Instruments. Statutes, Cases and Authorities. Second Edition.

*Conflict of Laws* (A).—Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

*Constitutional Law* (A).—Professor FRASER. Two hours a week. Case book to be announced.

\**Moot Court*.—Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

*Organization and Management of Corporations*.—Professor CLEPHANE. One hour a week. Clephane on the Organization and Management of Corporations.

*Patent Law Practice* (A).—Professor CHURCH. Two hours a week.

*Patent Office Practice and Substantive Patent Law*.—Mr. SUTTON. Two hours a week. Given for the first time second semester 1913-14.

*Preparation of Legal Instruments*.—Professor LATIMER. One hour a week.

\**Private Corporations* (A).—Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

*Suretyship*.—Assistant Professor JONES. Two hours a week. Ames' Cases on Suretyship.

#### *Second Semester*

*Conflict of Laws* (B).—Professor GREGORY. Two hours a week. Lorenzen's Cases on Conflict of Laws.

*Constitutional Law* (B).—Professor FRASER. Two hours a week. Case book to be announced.

*Federal Procedure*.—Professor BRANDENBURG. One hour a week.

*Legal Tactics and Ethics*.—Professor CLEPHANE. One hour a week.

\**Moot Court*.—Professors CLEPHANE, EARNEST and LATIMER. Two hours a week.

*Patent Law Practice* (B).—Professor CHURCH. Two hours a week.

*Patent Office Practice and Substantive Patent Law*.—Mr. SUTTON. Two hours a week. Given for the first time second semester, 1913-14.

\**Private Corporations* (B).—Assistant Professor JONES. Two hours a week. Warren's Cases on Corporations.

*Trusts*.—Assistant Professor FERSON. Three hours a week. Ames' Cases on Trusts.

*Wills and Administration*.—Professor PETER. One hour a week.

Second and third year subjects, not required and given in alternate years, are open to both second and third year students.

\* Required Subjects.

### B. Leading to the Degree of Master of Laws

Students admitted as candidates for the degree of Master of Laws are required to elect subjects, not previously taken covering a minimum of ten hours a week. These may be freely elected from the subjects offered by the Faculty of Law and from International Law given in Columbian College.

Any excess credits obtained in this Law School in the course leading to the degree of Bachelor of Laws may be applied toward the Master's degree. The degree of Master of Laws will not be conferred, however, until one year after the receipt of the Bachelor's degree.

*Advanced Practice.*—Candidates for the Master's degree may also elect advanced practice work in the Moot Court, receiving therefor a credit of two hours for the year.

### C. Leading to the Degree of Master of Patent Law

A candidate who has successfully completed the requirements prescribed for the degree of Master of Laws, if he has duly completed and received credit for the courses in Patent Law and Practice and Federal Procedure, may elect to become a candidate for the degree of Master of Patent Law instead, and that degree may be conferred upon him, but the above mentioned topics shall be counted only toward one degree, and shall not be available for the degree in Patent Law, if they have been counted toward any other degree.

### COURSE IN PATENT LAW

A special course in Patent Law Practice is given by Professor Church. The purpose of this course is to prepare those taking it for practice in all matters involving the law of patents. The course extends throughout one year, with two lectures or sessions of the Moot Court each week.

This course may be elected and counted by students toward the degree of Bachelor of Laws, and such students will be required to take only the first semester of the regular moot court work. A certificate, under the seal of the University, is granted to all students who complete this course.

In the present year an additional course in United States Patent Office Practice and Substantive Patent Law has been added and the work in Patent Law thus doubled. This course may also be counted by students toward the degree of Bachelor of Laws.

### COURSES IN PRACTICE

#### A. Moot Court Work

1. *For the Degree of Bachelor of Laws.*—Particular stress is laid upon moot court work. Aside from the practice court connected with the course in Patent Law, there are four courts in which undergraduate



students pursue their work. Three are *nisi prius* courts presided over by members of the Washington Bar in active practice. The fourth is a Court of Appeals to review the cases tried in the courts of first instance. This court is composed of the ex-Chief Justice of the United States Court of Claims and of members of the Washington Bar.

Every third-year student, before receiving the Bachelor's degree, is required to prepare the pleadings in and prosecute to judgment the required number of cases in the *nisi prius* courts, with the privilege of appeal to the appellate tribunal. At least two hours in each week during the year must be spent by each third-year student in active participation in moot court work in the court room to which he is assigned. Students electing Patent Law will be required, in view of the special moot court work in that course, to take only the first half-year of the regular moot court work.

Statements of facts are furnished, such as would be related to a lawyer in active practice by his client. Each student must determine whether or not upon such facts the particular case in hand is one of common law or equitable cognizance. He must then frame his pleadings, serve his writs, and answer his adversary's pleadings until issue is joined in legal manner, after which the case is brought on for hearing in strict accordance with the rules of actual practice. Juries are empaneled in accordance with settled legal procedure, witnesses are examined and cross-examined, and the case conducted through all the various stages of the trial or hearing down to and including the judgment or decree, after which, should the case be appealed, it must be carried through the appellate court, involving the preparation of the record on appeal, briefs of counsel, etc.

2. *For the Degree of Master of Laws.*—The same facilities for moot court work as are described above are afforded in the course leading to the degree of Master of Laws. All candidates for this degree taking moot court work are required to carry through the appellate court each case assigned to them.

3. *Officers and Equipment.*—The clerk of the Moot Court is one of the assistant clerks of the Supreme Court of the District of Columbia, but his assistants in each court room are chosen from the student body, from whose ranks are also drawn the criers, jurors, and other officials, thus giving to the students the benefit of practice in administrative judicial machinery. The Moot Court is to all intents and purposes an actual court. The rooms in which the sessions are held are fitted up with judges' benches, clerks' desks, and counsel tables, and from the time the crier announces that the court is in session until he announces its adjournment the procedure is identical with that of a regular judicial tribunal.

It is believed that any student who gives the proper attention to this feature of the law curriculum will be enabled to go out from this institution and creditably try cases in court, although he may never have been in an actual court room.



A careful record is kept of the work of each student, both as to his pleadings and his conduct of the case in court, and the ratings thus given determine, in connection with his ratings upon other subjects, whether or not he is entitled to a degree.

#### **B. Brief Making**

In view of the rapidly increasing bulk of our case law, it becomes absolutely indispensable that students should be taught to find authorities in point, to collate them, and to present them to the court in a clear and concise form. In order to afford this training a course in Brief Making is given. This course will be conducted in part in the Library of the Law School, so that the use of the digests and reports may be illustrated.

#### **C. Preparation of Legal Instruments**

Students are instructed in this course in the actual preparation of deeds, mortgages, wills, assignments, contracts, partnership agreements, and other legal instruments which a lawyer is called upon to prepare. Statements of facts are furnished to the class by the professor in charge, and each student is required to prepare the various forms of instruments. These are corrected by the professor and are discussed and criticised in class. Careful consideration is given to special forms of execution and acknowledgment when one of the parties to the instrument is a corporation, a partnership, a married woman, and the like.

#### **D. Legal Tactics and Ethics**

Every young lawyer entering upon his professional career is desirous of availing himself of the experience of an older practitioner and of learning many things which are not taught and cannot be taught from books. It is to meet the needs of this class of men that this course is given. It is in charge of a member of the Washington Bar whose practice has been an active one, extending over a period of many years.

A short introductory talk is given upon the relations between attorney and client, including the important subject of fees, after which the student is given the benefit of practical hints upon the manner of starting in practice and opening and furnishing an office, with suggestions as to office systems.

The student is told how to listen intelligently to his client's grievances; how to draw up the pleadings arising out of these grievances; how to prepare for trial the case thus made, including the work of preparing the evidence; how to try the case and examine and cross-examine witnesses; the manner of making up the record, and conducting the argument on appeal, including the use of authorities in court. The Canons of Professional Ethics adopted by the American Bar Association are studied in this course. Practical instruction in Extraordinary Legal Remedies constitutes a part of this course.

## EXAMINATION AND GRADES

*Regular Examinations.*—Written examinations are held at the close of each semester. These examinations are final as to the work of that semester. All students, unless specially excused by the Dean, are required to take the regular examinations in the subjects pursued.

No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the lectures and have done all the work required in the course of instruction upon that subject.

*Grades.*—At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, *excellent, good, satisfactory, fair, conditioned, and failed.*

*Conditions and Failures.*—A student receiving the grade of F (failed) in any subject will be required to repeat the subject.

A student receiving the grade of E (conditioned) in any subject will be required to repeat that subject unless he pass the *next* regular examination for removal of conditions with a grade of at least C.

Regular examinations for the removal of conditions are held during the first week of each academic year. Application for permission to take these examinations must be made in writing to the Secretary of the Law School not later than three days before the date for which the examination is scheduled. Special examinations for the removal of conditions are held at the end of each academic year for the benefit of candidates for the Bachelor's degree, who have been conditioned in not more than four semester hours during the first semester of their last year.

The instructors of the first year class are a committee to pass on the eligibility of a student to re-register, with power to warn for deficiency, and to refuse re-registration to any student whose work is deemed unsatisfactory.

*Special Examinations.*—No special examinations, other than those above provided for, will be granted to any students except those of the graduating class who, for good cause, shall have been excused by the Dean from taking any regular examination during the third year.

*Attendance.*—Regular attendance is required in all courses; and the examination grade of any student in any course may be withheld and the passing of another examination or the repetition of the course may be required on the sole ground of unsatisfactory attendance.

*Election of Courses.*—No student shall be allowed to register in courses aggregating more than fifteen hours during any one semester without first obtaining the permission of the Faculty.

Every student who is a candidate for graduation with the degree of Bachelor of Laws in his third year shall take and pass in each semester of this third year courses aggregating ten hours.

Election of courses to be taken must be made in all cases within ten days after the beginning of the semester in which such courses are given.

## DEGREES

1. *Bachelor of Laws*.—The degree of Bachelor of Laws will be conferred upon students who have studied law for a period of at least three years and passed satisfactory examinations upon subjects aggregating thirty-six year hours, and whose attendance and conduct have been satisfactory to the Faculty. The degree will not be conferred upon students deficient in Bills and Notes, Common Law Pleading and Practice, Contracts, Corporations, Equity, Evidence, Moot Court, Property I and II and Torts.

The degree of Bachelor of Laws *with distinction* will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. *Master of Laws or Master of Patent Law*.—The degree of Master of Laws or Master of Patent Law will be conferred upon students who have completed the work prescribed for these degrees with the grade of C or better, and whose attendance and conduct have been satisfactory to the Faculty.

## LAW LIBRARY AND READING-ROOM

A well-equipped working library, comprising about 6,000 volumes, is open to the students from 8.30 a.m. to 10.00 p.m. Competent librarians are in charge and will give students assistance in looking up subjects and in the use of books.

The library contains the complete decisions of the highest courts of thirty-eight states and the District of Columbia, the complete reports of the United States Supreme Court and the other Federal courts, the complete National Reporter System, the Century, Decennial and American Digests, the various encyclopaedias of law, the Lawyers Reports Annotated, the American Decisions, American Reports and American State Reports, the English Common Law and Chancery Reports, the English Reprints, the Law Journal Reports since 1865, and about eight hundred standard text-books, and legal periodicals.

In addition to these facilities, the students have free access to the Congressional Library, and other public libraries.

## PRIZES

*The Ordronaux Prize Scholarship*.—A prize scholarship, known as "The Ordronaux Prize Scholarship," is awarded to that member of the Second Year Class taking the regular course, who shall during his first and second years attain the highest average grade. In determining the average grade of contestants the grade received in each subject shall be multiplied by the number of hours given to such subject and the sum of the results divided by the total number of hours. The recipient of this prize scholarship shall be entitled to receive credit for tuition fees to the extent of ten hours work in his third year. Library and diploma fees will remain payable. The award of this scholarship is purely per-



sonal and will not be commuted to a cash payment, nor will it be transferable. The recipient of the scholarship must make use of the scholarship during the session next succeeding its award; otherwise, the same shall be awarded, upon like conditions, to the person having the next highest grade. This scholarship, for the session 1913-14 was awarded to Merrell Edward Clark.

*Ellsworth Prize.*—A prize of twenty-five dollars in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a regular student in the Patent Law Course. Awarded in 1913 to Lawrence A. Gale Miller.

*Phi Delta Phi Prize.*—The Marshall Chapter of Phi Delta Phi Fraternity, which is the local chapter, has offered a prize of twenty-five dollars cash, to be awarded to that member of the first year class taking the regular course, who shall attain the highest average grade, the grade to be determined in the same manner as the Ordranax Prize. Awarded in 1913 to John Monteith McFall.

*American Law Book Company Prize.*—A prize, offered by the American Law Book Company, of the Students Edition of "Cyc" in twelve volumes is awarded each year to the student of the Law School, graduating in the entire course for the LL.B. degree, with the highest scholastic standing for the entire course. This highest standing is ascertained in the same manner as the Ordranax Prize. This prize is to be awarded at Commencement. Awarded 1913 for the first time to Loyd Hall Sutton.

*John Byrne and Company Prize.*—A prize offered by John Byrne and Company of Washington, D. C., consisting of the four volumes of their Legal Classics is awarded each year to the student attaining the highest grade in Real Property II (b). Offered 1913-14 for the first time.

#### PUBLIC SPEAKING AND DEBATING

Excellent facilities for training in public speaking and parliamentary law are afforded by the Columbian Debating Society and the University Congress which have been organized in the Law School, and which meet weekly for debate. Membership in these societies is entirely optional, but their work is encouraged in every legitimate way by the Faculty, and students are urgently advised to take part in their exercises.

Intercollegiate debates are also held. Membership on the teams which represent the University in these contests must be won in preliminary contests held for such purpose. These debates are conducted under the supervision of a committee of the University Faculty.

#### ADMISSION TO THE BAR

By the rules of the Supreme Court of the District of Columbia, applicants for admission to the Bar are required to have studied law for three years under the direction of a competent attorney, but by those rules the course in the Law School of the University is regarded as dis-



three years under the direction of a competent attorney, but by those rules the course in the Law School of the University is regarded as discharging this requirement. Its work is also accepted as fulfilling the requirements for preliminary law study in substantially all of the other jurisdictions of the United States.

#### FEES

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	3
3. Tuition fee per annum for each hour taken per week ...	10
4. Fee for graduation.....	10
5. Fee for a certificate under the seal of the University....	2

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

The library fee will not be charged for the first half-year during which a course is completed in the case of students who enter at the beginning of the second half-year and pay the library fee for that year.

#### PAYMENT OF FEES

Matriculation, library and other special fees are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. Fees are payable at the office of the Treasurer of the University, 2024 G Street, or of the Secretary of the Law School.

#### BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

For catalogues, application blanks, and further information, address  
 THE SECRETARY OF THE LAW SCHOOL,  
*The George Washington University,*  
*New Masonic Temple, Washington, D. C.*

## MEDICAL SCHOOL

### FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY  
WILLIAM CLINE BORDEN, M.D.....Dean, and Professor of Surgery  
J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus  
ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,

Dean Emeritus, and Professor of Obstetrics

GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine

HENRY CRÈCY YARROW, M.D.....Professor of Dermatology, Emeritus

DANIEL KERFOOT SHUTE, A.B., M.D.,

Professor of Neuro-Anatomy and Clinical Professor of Ophthalmology

STERLING RUFFIN, M.D.....Professor of Medicine

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor of Chemistry

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology, Rhinology, and Otology

JOHN WESLEY BOVÉE, M.D.....Professor of Gynecology

THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine

AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery

RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology

FRANCIS RANDALL HAGNER, M.D.,

Professor of Genito-Urinary Surgery and Venereal Diseases

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence

ALBERT LIVINGSTON STAVELY, M.D...Clinical Professor of Gynecology

WILLIAM ALANSON WHITE, M.D.,

Professor of Psychiatry and Clinical Professor of Neurology

ARTHUR AUGUSTIN SNYDER, M.D.....Clinical Professor of Surgery

SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology

JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery

WILLIAM KENNEDY BUTLER, M.D.....Professor of Ophthalmology

BUCKNER MCGILL RANDOLPH, M.D.,

Professor of Materia Medica and Therapeutics

LUTHER HALSEY REICHELDERFER, M.D., Clinical Professor of Surgery

JAMES DUDLEY MORGAN, A.B., M.D.,

Clinical and Associate Professor of Medicine

LOUIS ANATOLE LAGARDE, M.D.....Professor of Military Surgery

GIDEON BROWN MILLER, S.B., M.D...Clinical Professor of Gynecology

JULIAN MAYO CABELL, M.D.,.....Clinical Professor of Obstetrics

OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology

and Associate Professor of Anatomy

JOHN BRADFORD BRIGGS, S.B., M.D.,

Professor of Bacteriology and Pathology

- W. SINCLAIR BOWEN, M.D. .... Clinical Professor of Obstetrics  
 EDGAR PASQUAL COPELAND, M.D.,  
     Professor of Hygiene and Associate in Pediatrics  
 OSCAR ADDISON MACK McKIMMIE, M.D.,  
     Clinical Professor of Laryngology and Otology  
 LOUIS MACKALL, M.D. .... Clinical Professor of Medicine  
 CARL LAWRENCE DAVIS, M.D. .... Professor of Anatomy  
 EDWARD RHODES STITT, A.B., M.D. .... Professor of Tropical Medicine  
 NOBLE PRICE BARNES, M.D., ... Associate Professor of Materia Medica  
     and Therapeutics, and Clinical Associate in Medicine  
 HURON WILLIS LAWSON, S.M., M.D. ... Associate Professor of Obstetrics  
 FRANK ADELBERT HORNADAY, S.B., M.D.,  
     Associate Professor of Chemistry  
 JOSEPH DUERSON STOUT, A.B., M.D.,  
     Associate Professor of Physiology and Pharmacology  
 HENRY KNOX CRAIG, M.D., Associate Professor of Bacteriology and  
     Pathology and Curator of the Museum  
 DANIEL WEBSTER PRENTISS, M.D. .... Clinical Associate in Surgery  
 JOHN BENJAMIN NICHOLS, M.D., ... Associate in Medicine and Dietetics  
 CHARLES STANLEY WHITE, M.D. .... Associate in Surgery  
 HARRY HAMPTON DONNALLY, A.M., M.D.,  
     Clinical Associate in Pediatrics  
 WILLIAM FRANCIS MATTINGLY SOWERS, A.B., M.D., Associate in Surgery  
 HENRY RANDALL ELLIOTT, M.D.,  
     Associate in Physiology and Pharmacology  
 JOHN T. KELLEY, M.D. .... Clinical Associate in Obstetrics  
 WALTER ASHBY FRANKLAND, M.D. .... Clinical Associate in Medicine  
 J. LEWIS RIGGLES, M.D. .... Associate in Anatomy and Gynecology  
 FRANK LEECH, M.D. .... Clinical Associate in Pediatrics  
 WILLIAM CABELL MOORE, M.D. .... Associate in Medicine  
 CHARLES AUGUSTUS SIMPSON, M.D. .... Associate in Dermatology  
 COURSEN BAXTER CONKLIN, M.D. .... Associate in Medicine  
 EDWARD GRANT SEIBERT, M.D.,  
     Instructor in Laryngology and Ophthalmology  
 WALTER HIBBARD MERRILL, M.D. ... Instructor in Electro-Therapeutics  
 HOBART SOUTHWORTH DYE, M.D.,  
     Instructor in Laryngology and Otology  
 TRUMAN ABBE, M.D. .... Instructor in Surgery  
 VIRGIL B. JACKSON, M.D. .... Instructor in Gynecology  
 EDMUND THOMAS MURDAUGH FRANKLIN, M.D. ... Instructor in Surgery  
 WILLIAM J. FRENCH, M.D. .... Instructor in Materia Medica  
 CHARLES WILBUR HYDE, M.D., Instructor in Medicine and Anaesthesia  
 ADAM KEMBLE, M.D. .... Instructor in Genito-Urinary Surgery  
 HOMER GIFFORD FULLER, M.D. ... Instructor in Genito-Urinary Surgery  
 CLINE N. CHIPMAN, M.D. .... Instructor in Anaesthesia  
 BENJAMIN RUSH LOGIE, M.D. .... Instructor in Neurology  
 GEORGE HENRY SCHWINN, M.D., Instructor in Psychiatry and Neurology

ALEXANDER YELVERTON PEYTON GARNETT, M.D.,

Instructor in Obstetrics

HARRY HYLAND KERR, M.D.....Instructor in Operative Surgery

WILLIAM JOHNSTON MALLORY, M.D.....Instructor in Medicine

ELIJAH WHITE TITUS, Phar.D., M.D.....Instructor in Obstetrics

DANIEL LE RAY BORDEN, M.D...Instructor in Surgery and Gynecology

ALBERT ELWOOD PAGAN, M.D.....Instructor in Gynecology

WILLIAM HENRY HUNTINGTON, M.D.,

Instructor in Laryngology and Otology

J. IRVING SLOAT, M.D.....Instructor in Pharmacology

J. A. F. PFEIFFER, M.D.....Special Instructor in Pathology

BERNARD GLUECK, M.D.....Instructor in Psychiatry

HENRY W. JAEGER, M.D.....Instructor in Pharmacology

#### THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY

##### HOSPITAL

STERLING RUFFIN, M.D.....Physician-in-Chief

GEORGE NICHOLAS ACKER, M.D.....Associate Physician

BUCKNER MCGILL RANDOLPH, M.D.....Associate Physician

COURSEN BAXTER CONKLIN, M.D.....Associate Physician

WILLIAM CLINE BORDEN, M.D.....Surgeon-in-Chief

JOHN RYDER WELLINGTON, M.D.....Associate Surgeon

CHARLES STANLEY WHITE, M.D.....Associate Surgeon

AURELIUS RIVES SHANDS, M.D.....Orthopedic Surgeon

FRANCIS RANDALL HAGNER, M.D.....Genito-Urinary Surgeon

HOMER GIFFORD FULLER, M.D.....Associate Genito-Urinary Surgeon

JOHN WESLEY BOVÉE, M.D.....Gynecologist-in-Chief

GIDEON BROWN MILLER, S.B., M.D.....Associate Gynecologist

ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.,

Obstetrician-in-Chief

HURON WILLIS LAWSON, M.D.....Associate Obstetrician-in-Chief

ELIJAH WHITE TITUS, M.D.....Assistant Obstetrician

GEORGE NICHOLAS ACKER, M.D.....Pediatrician-in-Chief

EDGAR PASQUAL COPELAND, M.D.....Associate Pediatrician

HENRY CRÈCY YARROW, M.D.....Dermatologist-in-Chief

RANDOLPH BRYAN CARMICHAEL, M.D.....Associate Dermatologist

CHARLES WILLIAMSON RICHARDSON, M.D.....Laryngologist

DANIEL KERFOOT SHUTE, M.D.....Ophthalmologist

WILLIAM KENNEDY BUTLER, M.D.....Ophthalmologist

EDWARD GRANT SEIBERT, M.D.,

Associate Laryngologist and Ophthalmologist

WALTER HIBBARD MERRILL, M.D.....Radiographer

JOHN BRADFORD BRIGGS, M.D.....Pathologist

FRANK ADELBERT HORNADAY, S.B., M.D.,

Director of the Clinical Laboratory



CHARLES WILBUR HYDE, M.D.....	Anaesthetist
CLINE N. CHIPMAN, M.D.....	Anaesthetist
JOHN ADOLPH ROLLINGS, M.D.....	Resident Physician (on leave)
CUSTIS LEE HALL, M.D.....	Acting Resident Physician
ROY MACLEAY FORTIER, M.D.....	Associate Resident Physician
JOY ALVA OMER, M.D.....	Associate Resident Physician
EUGENE DEYERLE SUPPLEE .....	Senior Student Intern
TSANNYOEN PHILIP SZE .....	Senior Student Intern
FRANK M. CERVONN, A.B., Phar.D.....	Pharmacist
MARY WINIFRED GLASCOCK, R.N.	Superintendent of Nurses and Prin- cipal of the Training School for Nurses.
JOHN BRUCE COPPING.....	Superintendent of the Hospital

#### DISPENSARY

ALBERT FREEMAN AFRICANUS KING, M.D.....	Obstetrician-in-Chief
STERLING RUFFIN, M.D.....	Physician-in-Chief
JOHN WESLEY BOVÉE, M.D.....	Gynecologist-in-Chief
WILLIAM CLINE BORDEN, M.D.....	Surgeon-in-Chief
BENJAMIN RUSH LOGIE, M.D.....	Director of the Dispensary
WILLIAM CABELL MOORE, M.D....	Assistant Director of the Dispensary

#### General Medicine

BUCKNER MCGILL RANDOLPH, M.D.....	Attending Physician
WALTER ASHBY FRANKLAND, M.D.....	Attending Physician
WILLIAM CABELL MOORE, M.D.....	Attending Physician
COURSEN BAXTER CONKLIN, M.D.....	Attending Physician
WILLIAM JOHNSTON MALLORY, M.D.....	Attending Physician

#### General Surgery

TRUMAN ABBE, M.D.....	Attending Surgeon
EDMUND THOMAS MURDAUGH FRANKLIN, M.D.....	Attending Surgeon
JOHN POTTS FILLEBROWN, M.D.....	Attending Surgeon
JANVIER W. LINDSEY, M.D.....	Attending Surgeon

#### Genito-Urinary Diseases

FRANCIS RANDALL HAGNER, M.D.....	Genito-Urinary Surgeon
HOMER GIFFORD FULLER, M.D.....	Associate Surgeon
ADAM KEMBLE, M.D.....	Associate Surgeon

#### Gynecology

DANIEL LERAY BORDEN, M.D.....	Attending Gynecologist
ALBERT ELWOOD PAGAN, M.D.....	Attending Gynecologist

#### Obstetrics

HURON WILLIS LAWSON, M.D.....	Associate Obstetrician-in-Chief
ELIJAH WHITE TITUS, M.D.....	Assistant Obstetrician

**Eye, Ear, Throat, and Nose**

EDWARD GRANT SEIBERT, M.D.....Laryngologist and Ophthalmologist

**Neurology**

BENJAMIN RUSH LOGIE, M.D.....Neurologist

**Radiography**

WALTER HIBBARD MERRILL, M.D.,  
Electro-Therapeutist and Radiographer

**Dermatology**

CHARLES AUGUSTUS SIMPSON, M.D.....Attending Dermatologist

**Pathology**

JOHN BRADFORD BRIGGS, M.D.....Pathologist

**Laboratory**

FRANK ADELBERT HORNADAY, M.D.....Director

**Medical Building**

HENRY KNOX CRAIG, M.D.....Librarian

ROBERT MAURER, AB., LL.M.,

Official Evaluator for Premedical Education

PATRICK P. VANE.....Superintendent of the Building

ANNA ELIZABETH SELLNER.....Secretary to the Dean

**HISTORICAL**

*The Medical School of the George Washington University*, in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required, and in 1893 attendance on four annual courses was made obligatory upon all candidates for the degree of Doctor

of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Medical School. In 1902 the old Medical School building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

### EDUCATIONAL POSITION

The Medical School of the University has been for several years a member of the Association of American Medical Colleges. It is one of Medical Colleges designated as "class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

*The degree of M.D. given by the University is recognized as evidence of adequate medical education by every medical examining board in the United States and with credentials of required preliminary education, will admit the holder of the degree to any state or governmental examination.*

These facts guarantee the character of the work done by the School and insures its students and graduates all the advantages which accrue from such association and recognition.

### BUILDINGS AND OTHER FACILITIES

#### Buildings of the Medical Department

All the buildings adjoin each other and consist of the Medical School Building and the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city within one block of both systems of car lines. As the Hospital and Dispensary adjoin the School, their clinical facilities are easily accessible to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the School laboratories.

*Medical School Building.*—A modern commodious, five-story structure, with spacious, well-lighted, well-ventilated lecture and class rooms, laboratories, and students' rooms. It has an elevator service, and is equipped throughout with steam heat, gas, electricity, and all modern improvements.

*Laboratories.*—Six in number (for anatomy, chemistry, physiological and clinical chemistry, histology and embryology, physiology and pharmacology, and bacteriology and pathology) are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

*University Medical Library.*—Open for study and consultation from 9 a.m. to 9 p.m. with a Librarian who is a graduate of Medicine in charge. It contains at present more than 3,000 volumes, and provision is made to

add to it as published the important new works on medicine. The most important medical periodicals are regularly received. The Library is an excellent working collection, as it affords opportunity to read up adequately on the subjects presented in the courses.

*Pathological Museum.*—Contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

#### ADVANTAGES OF LOCATION

##### Advantages of Washington as a place for pursuing the study of medicine

This city now has nearly half a million inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of over three thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the Faculty.

The *great libraries and museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's Office of the United States Army is the most complete medical library in the world, and all leading medical periodicals of the world are subscribed for. All the facilities of this great library are open to *medical students*. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various Government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivaled opportunity for studying the conditions met with in military and general surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum which contains the most complete and best arranged collection of *materia medica* in the world. The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the *Army and Navy Medical Schools* have been here located. The Alumni of this School are largely represented in all public services, and have been highly successful in passing the rigid examinations given by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this School.

*Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.*



## ADMISSION

The requirements for admission to the Medical School for the session 1914-15 are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are:

A. The minimum requirement for admission is one year of college work in Physics, Chemistry and Biology, preceded by fourteen units of secondary school work made up as follows:

*Seven Required Units.*—English (Reading and Practice), 2 units; Algebra to quadratics, 1 unit; Plane Geometry, 1 unit; German or French, or Latin or Greek, 2 units; History, 1 unit.

*Seven Elective Units.*—To be selected from the following: English, Mathematics, Latin, Greek, German, French, Spanish, Scandinavian, Science with laboratory work, Agriculture, Drawing, Manual Training, Domestic Science, Music.

B. A Bachelor's degree from an approved college or University.

A unit is the credit value of 36 weeks' work of five recitation periods per week, each period to be not less than 40 minutes. A point is a subject pursued through one-half the above time. Two points may be considered the equivalent of one unit.

An examination is given by the University in the latter part of May and September of each year to students who are deficient in whole or part of the subjects required for entrance to the Premedical Course. Candidates desiring examination must submit an application for the examination and submit certificates of character to the Dean before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of the examination.

As the laws relating to the preliminary educational qualifications required of physicians differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

## PRELIMINARY (PREMEDICAL) YEAR

A preliminary year is offered by the University to meet the requirement of a year of College work necessary to enter the freshman class in Medicine. This year is given in Columbian College (Department of Arts and Sciences). Students desiring to take this year will be ad-

mitted on the *fourteen* unit entrance requirement set forth on page 141 of this catalogue and will be required to pursue the full year's courses, both didactic and laboratory in Biology, Physics and Chemistry.

#### ADMISSION TO COLUMBIAN COLLEGE

Applicants for admission to the Freshman Class in Columbian College for the combined courses leading to the degrees of Bachelor of Arts or Bachelor of Science in Medicine and Doctor of Medicine must meet the general admission requirements of *fifteen* units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirements must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

#### COURSES AND DEGREES OFFERED BY THE UNIVERSITY IN ADDITION TO OR IN COMBINATION WITH THE COURSE FOR THE DEGREE OF DOCTOR OF MEDICINE

The states of North Dakota, Iowa, Minnesota, South Dakota, Colorado, Indiana and Kentucky now require applicants for the practice of medicine to have two years of college work in addition to graduation in medicine.

To students who intend to practice in these states or who desire two years of college work before entering upon the study of medicine, the University offers a six-year combination course, by which a student may meet the requirements of these states and at the same time obtain the degree of Bachelor of Science in Medicine and Doctor of Medicine.

#### Six-year course for the Degree of Bachelor of Science in Medicine and Doctor of Medicine

Regular students enrolling for this course will complete two years of work aggregating at least thirty-six prescribed hours in Columbian College, and the four-year course in the Medical School. On the completion of this six-year course the student will receive at the same time the degree of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

a. Columbian College:

SUBJECT	HOURS
Biological Sciences:	
Zoology 1.....	3
Botany 1.....	3
Chemistry 1, 2, 23.....	7
English 1 or 2.....	3
German, French, or Spanish.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 3 and 2.....	5
Psychology and Logic.....	3
	<hr/>
	36

b. Medical School:

The four-year course for the degree of Doctor of Medicine.

Seven-year course for the Degree of Bachelor of Arts and Doctor of Medicine

Regular students in this course will complete at least forty-eight hours, as prescribed in Columbian College, and the four-year course in the Medical School. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The forty-eight hours of prescribed subjects in Columbian College are as follows:

Columbian College:

SUBJECT	HOURS
Biological Sciences:	
Zoology 1, 2.....	6
Botany 1.....	3
Chemistry 1, 2, 23.....	7
English 1 or 2.....	3
German.....	6
French or Spanish.....	6
History.....	3
Mathematics 3 or 6.....	3
Physics 3 and 2.....	5
Psychology and Logic.....	3
Economics, History, or English.....	3
	<hr/>
	48

## ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students who have attended one or more terms at any other medical college in good standing, and who have the necessary preliminary educational requirements, may be admitted to advanced standing upon passing the examination required of students for the stage at which they propose to enter, or upon presenting certificates of examination covering courses equal to those in this School.

Students who have been in attendance upon an Arts course in other accredited colleges or universities may be admitted to advanced standing in any of the premedical courses offered by the University upon examination or upon presentation of properly certified evidence of satisfactory completion of work for which credit is asked.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students to any of the courses, provided they have the educational attainments which will enable them to pursue properly the studies they elect.

## ACADEMIC YEAR

The *Academic Year* begins on the last Wednesday in September and ends on the Wednesday following the Wednesday nearest the first day of June. It is divided into two semesters of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of thirty-two weeks each, exclusive of vacations and holidays. The next session, the ninety-second, begins September 30, 1914, and ends June 9, 1915.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

## SYSTEM OF INSTRUCTION

Instruction is carried on by laboratory work, lectures, recitations, bedside instruction, and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical School are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.



The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to ground thoroughly the students in the knowledge which is necessary to a practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

*The policy adopted by the School is to give a comprehensive, well graded and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.*

### ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table. Major subjects are in italics:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
<i>Anatomy.</i>	<i>Anatomy.</i>	<i>Medicine.</i>	<i>Medicine.</i>
<i>Histology.</i>	<i>Physiological</i>	<i>Surgery.</i>	<i>Surgery.</i>
<i>Embryology.</i>	<i>Chemistry.</i>	Surgical	Orthopædics.
<i>Physiology.</i>	<i>Pathology.</i>	Pathology.	Genito-Urinary
<i>Chemistry.</i>	<i>Bacteriology.</i>	Fractures and	Diseases.
	Clinical	Dislocations.	Operative
	Microscopy.	<i>Obstetrics.</i>	Surgery.
	Materia Medica.	<i>Therapeutics.</i>	Gunshot
	Pharmacology.	Radiography	Wounds.
	Minor Surgery.	Radiotherapy	<i>Obstetrics.</i>
	Physical	<i>Gynecology.</i>	<i>Gynecology.</i>
	Diagnosis.	Medical	Laryngology
	Pathological	Jurisprudence.	and Otology.
	Physiology.	Clinical	Ophthalmology
	Hygiene.	Chemistry.	Dermatology.
	Psychology	Dietetics.	Psychiatry.
		Physical	Pediatrics.
		Diagnosis.	Neurology.
		Tropical	<i>Clinics.</i>
		Medicine.	
		<i>Clinics.</i>	

The *clinics* above listed comprise the medical, surgical, and other clinics given in the third and fourth years, and are as hereafter noted under the announcements of the different clinical subjects.

## OUTLINE OF CURRICULUM

## Hours of Required Work in Each Subject

(On the basis of 32 actual weeks in each year)

SUBJECTS	YEARS	HOURS	
		Totals* Didactic, Lab. and Clinical	Didactic not to exceed
Anatomy.....	I	490	90
Anatomy.....	II	168	30
		— 658	— 120
Histology and Embryology.....	I	224	60
		— 224	— 60
Chemistry.....	I	310	90
Chemistry.....	II	98	30
		— 408	— 120
Physiology.....	I	184	72
Physiology.....	II	68	32
		— 252	— 104
Psychology.....	II	32	32
		— 32	— 32
Bacteriology.....	II	126	30
Pathology.....	II	282	60
		— 408	— 90
Hygiene.....	II	32	32
		— 32	— 32
Dietetics.....	III	24	24
		— 24	— 24
Pharmacology.....	II	140	28
Materia medica.....	II	40	40
Therapeutics.....	III	64	64
Radiotherapy.....	III	8	8
		— 252	— 140
Gynecology.....	III and IV	144	48
		— 144	— 48
Obstetrics.....	III and IV	192	64
		— 192	— 64

\* The number of hours represents the amount of time *each* student devotes to the course. In addition to the hours scheduled in the third and fourth years, each student is required to do satisfactorily considerable practical work: he is assigned to cases in the University and Garfield Hospitals, is required to assist at operations, to attend cases of labor, administer anaesthetics, attend autopsies, and to take the history of cases. Fully 120 hours annually are required to do this unscheduled work.

SUBJECTS	YEARS	HOURS (continued)	
		Totals* Didac- tic, Lab. and Clinical	Didactic not to exceed
Medicine.....	II, III, IV		
General Medicine.....		606	200
Clinical Microscopy and Clinical			
Pathology.....		64	0
Physical Diagnosis.....		80	40
Tropical Diseases.....		12	12
Dermatology.....		48	12
Pediatrics.....		120	18
Neurology.....		64	24
Psychiatry.....		42	12
Medical Jurisprudence.....		30	30
		— 1066	— 348
Surgery.....	II, III, IV		
General Surgery.....		540	144
Minor Surgery.....		40	20
Surgical Pathology.....		12	12
Radiography.....		16	0
Fractures, etc.....		16	16
Military Surgery.....		8	8
Ophthalmology.....		64	16
Otology and Laryngology.....		60	24
Genito-Urinary Surgery.....		48	16
Orthopedics.....		48	16
		— 852	— 272
Grand totals.....		4536	1454

The number of clinic hours as given in this announcement is tentative only for, owing to the changes made necessary by the advanced admission requirements the schedule for the third and fourth years has not been completed at the time of publication of this catalogue.

#### ANATOMY

CARL LAWRENCE DAVIS, M.D.....Professor  
 OSCAR BENWOOD HUNTER, M.D.....Professor of Histology and  
 Embryology and Associate Professor of Anatomy

The instruction in the various anatomical sciences—gross human anatomy, neurology, embryology and histology—is carried on by the Division of Anatomy of which the Professor of Anatomy is the head.

This insures complete correlation of the various anatomical branches and adequate instruction in each.

During the first year the course in Gross Anatomy is given mainly by practical laboratory work.

Osteology and Syndesmology are taught by recitations and demonstrations at the beginning of the course, preparatory to the more advanced studies in anatomy. Complete disarticulated skeletons are loaned to the students, so that they may familiarize themselves with the osteological features of the various parts during their dissection. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting room work is supplemented by demonstration, recitation and lectures, illustrated by lantern slides, models, diagrams and special dissections. The systematic study of the gross and minute anatomy of the central nervous system and organs of special sense is pursued by means of lectures, recitations, and laboratory work.

In the second year a course in topographical anatomy is given, in which recitations and laboratory demonstrations, frozen sections and special dissections are used to familiarize the student thoroughly with the subject.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Anatomy.....	I	490	90
Anatomy.....	II	168	30
		— 658	— 120

In Histology instruction is given in the care and use of the microscope and in the preparation of tissues (fixing, blocking, cutting, staining, etc) for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures, recitations and stereopticon demonstrations.

The course in Embryology is devoted to the study of Vermes, showing maturation, impregnation, segmentation, etc., and to series of chick and mammalian embryos, special stress being laid upon the development of the foetal membranes and organs. Lectures, recitations and demonstrations with laboratory models are also given.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Histology and Embryology.....	I	224	60
		— 224	— 60

PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph.D.....	Professor
JOSEPH DUERSON STOUT, A.B., M.D.....	Associate Professor
HENRY RANDALL ELLIOTT, M.D.....	Associate



The course in physiology consists of lectures, recitations, demonstrations, laboratory exercises and conferences during the first year. It begins in the second half of the first semester, so that the student is, almost at the beginning of his course in medicine, introduced to the functional viewpoint in his work. In the first semester general physiology is taken up both by lectures and laboratory exercises. In the second semester more intensive work is done, and the physiology of the bodily systems is considered. The functions of the nervous system and special senses, of the blood, of the heart and circulatory system, of glands, of the respiratory mechanisms, and of reproduction are considered by means of lectures and recitations, and, as far as possible, experimentally. In the laboratory each student performs the main experiments illustrating the facts regarding bodily function, and demonstration experiments are given of those functions which are too complex for the student to perform by himself. In this laboratory work each student is required to keep records of his experiments, and each experiment is supervised and the record criticized and checked by one of the instructors before the student leaves the laboratory for the day. The class is divided into sections for oral recitations, which are supplemented by written recitations.

In the second year a series of laboratory exercises on the physiological action of drugs is given (see the announcement under Department of Pharmacology and Therapeutics), and in conjunction with that laboratory work lectures are given and recitations are held in which the functional disturbances in disease are considered. In this course special attention is given to the abnormalities of action of the heart and circulatory system, to the mechanical disturbances in respiration, and to the disturbances of the nervous system and the special senses. Abnormalities of metabolism, matters which are almost exclusively chemical, are not taken up in this course. By this course it is intended to bring the course in normal physiology into closer relations with the succeeding courses in Pathology, Therapeutics and General Medicine.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Physiology.....	I	184	72
Physiology.....	II	68	32
		— 252	— 104
Psychology.....		32	32

#### CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor  
FRANK ADELBERT HORNADAY, S.B., M.D.....Associate Professor

*Inorganic Chemistry.*—A series of recitations, in which the subject is reviewed and its relation to medicine emphasized.

*Qualitative Analysis.*—A brief course, with stress upon its application in medicine.

*Organic Chemistry.*—A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

*Physiological Chemistry.*—A series of lectures, laboratory work and recitations on the proximate principles of the human body.

*Clinical Chemistry.*—A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Chemistry.....			
Inorganic Review			
Qualitative Analysis	I	310	90
Organic			
Physiological.....	II	98	30
		— 408	— 120
*Clinical Chemistry.....	III	48	12

\*See also announcement under Medicine.

#### MATERIA MEDICA AND THERAPEUTICS

BUCKNER MCGILL RANDOLPH, M.D. ....	Professor
NOBLE PRICE BARNES, M.D. ....	Associate Professor
JOSEPH DUERSON STOUT, A.B., M.D. ....	Associate
HENRY RANDALL ELLIOTT, M.D. ....	Associate
WALTER HIBBARD MERRILL, M.D. ....	Instructor
WILLIAM J. FRENCH, M.D. ....	Instructor
J. IRVING SLOAT, M.D. ....	Instructor
HENRY W. JAEGER, M.D. ....	Instructor

*Second Year.*—(1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations of drugs. (5) The laboratory course in connection with the study of Pharmacology consists of practical instruction and experiments in pharmacodynamics. The student performs experiments showing the effects of certain drugs on digestion and investigates the physiological actions of such drugs as Morphine, Atropine, Aconite, Strychnine, Digitalis, Veratrine, Phytostigmine, Cocaine, Extr. Suprarenal glands, etc., and the effects of acids and alkalies in varying strength on the skin, mucous membrane and other tissues.

*Third Year.*—(1) Systematic lectures and recitations on the physiological action of drugs and other remedial agents, as demonstrated by lab-

oratory experiment and clinical application; their therapeutic use in disease; their modes of administration; and a review of their toxicology. (2) A review of the principles of prescription writing, with practical exercises by students in writing prescriptions in the metric and English systems. (3) Lectures in applied therapeutics, devoted to the study of the application of remedial measures to morbid physiological and pathological states, as they occur clinically. (4) Lectures and section demonstrations in electro-therapeutics and Roentgen therapy.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Pharmacology.....	II	140	28
Materia Medica and Toxicology...	II	40	40
Therapeutics.....	III	64	64
Radiotherapy.....	III	8	8
		— 252	— 140

#### DIETETICS

JOHN BENJAMIN NICHOLS, M.D.....Associate

A thorough course of lectures on the principles of feeding in health and disease.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic
Dietetics.....	III	24	24

#### PATHOLOGY AND BACTERIOLOGY

JOHN BRADFORD BRIGGS, S.B., M.D.....Professor

HENRY KNOX CRAIG, M.D.....Associate Professor

J. A. F. PFEIFFER, M.D.....Special Instructor

*Bacteriology.*—The first part of the session is devoted to a laboratory course of instruction in the fundamental principles and methods of pure bacteriology. A thorough drilling is given in the preparation of culture media, in sterilization and disinfection, staining, and in the several methods of differentiating bacteria.

*Pathology.*—The course in Pathology comprises general and special pathology. Post-mortem examinations will be utilized when possible. Coincidentally with the above is included the study of the principal pathogenic bacteria: the principles of immunity and serum therapy.

The course of instruction in special pathology will include the study of those processes requiring surgical relief; the healing of wounds and other injuries; of special diseases, neoplasms, and problems of experimental pathology.

The course in *Clinical Microscopy* comprises the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Bacteriology.....	II	126	30
Pathology.....	II	282	60
		— 408	— 90
*Clinical Microscopy.....		64	0

#### MEDICINE

STERLING RUFFIN, M.D..... Professor  
 GEORGE NICHOLAS ACKER, A.M., M.D.,

Professor of Pediatrics and Clinical Professor of Medicine

THOMAS ASH CLAYTOR, M.D..... Clinical Professor of Medicine

RANDOLPH BRYAN CARMICHAEL, M.D..... Professor of Dermatology

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,

Professor of Medical Jurisprudence

WILLIAM ALANSON WHITE, M.D.,

Professor of Psychiatry and Clinical Professor of Neurology

JAMES DUDLEY MORGAN, A.B., M.D.,

Clinical and Associate Professor of Medicine

EDGAR PASQUAL COPELAND, M.D.,

Professor of Hygiene and Associate in Pediatrics

LOUIS MACKALL, M.D..... Clinical Professor of Medicine

EDWARD RHODES STITT, A.B., M.D..... Professor of Tropical Medicine

JOHN BENJAMIN NICHOLS, M.D.... Associate in Medicine and Dietetics

WALTER ASHBY FRANKLAND, M.D..... Clinical Associate in Medicine

FRANK LEECH, M.D..... Clinical Associate in Pediatrics

WILLIAM CABELL MOORE, M.D..... Associate in Medicine

CHARLES AUGUSTUS SIMPSON, M.D..... Associate in Dermatology

COURSEN BAXTER CONKLIN, M.D..... Associate in Medicine

CHARLES WILBUR HYDE, M.D.. Instructor in Medicine and Anaesthesia

BENJAMIN RUSH LOGIE, M.D..... Instructor in Neurology

GEORGE HENRY SCHWINN, M.D., Instructor in Psychiatry and Neurology

WILLIAM JOHNSTON MALLORY, M.D..... Instructor in Medicine

BERNARD GLUECK, M.D..... Instructor in Psychiatry

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

\* See also announcement under Medicine.



The third-year class is divided into small sections, which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students afford a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material (see announcement of Psychiatry and Clinical Neurology).

SUBJECT	YEARS	HOURS	
		Total Didactic Lab. and Clinical	Didactic not to exceed
Medicine.....	II, III, IV		
General Medicine.....		558	188
*Clinical Microscopy and clinic- al pathology.....		64	0
†Clinical chemistry.....		48	12
Physical Diagnosis.....		80	40
Tropical Diseases.....		12	12
Dermatology.....		48	12
Pediatrics.....		120	18
Neurology.....		64	24
Psychiatry.....		42	12
Medical Jurisprudence.....		30	30
		— 1066	— 348

\* See also announcement under Bacteriology and Pathology.

† See also announcement under Chemistry.

#### TROPICAL MEDICINE

EDWARD RHODES STITT, A.B., M.D., Surgeon U.S.N.....Professor

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

#### PSYCHIATRY AND CLINICAL NEUROLOGY

WILLIAM ALANSON WHITE, M.D., Superintendent of the

Government Hospital for the Insane.....	Professor
BENJAMIN RUSH LOGIE, M.D.....	Instructor
GEORGE HENRY SCHWINN, M.D.....	Instructor
BERNARD GLUECK, M.D.....	Instructor

A series of lectures and clinics is given upon the subject of insanity in its various forms.

These clinics are given at the Government Hospital for the Insane, which, with its more than two thousand beds, affords one of the largest clinics in this country.

Students are taught in the same classes with students of the Army and Navy Medical Schools.

#### PEDIATRICS

GEORGE NICHOLS ACKER, A.M., M.D.....	Professor
EDGAR PASQUAL COPELAND, M.D.....	Associate
HARRY HAMPTON DONNALLY, M.D.....	Clinical Associate
FRANK LEECH, M.D.....	Clinical Associate

Didactic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

#### PHYSICAL DIAGNOSIS

WILLIAM CABELL MOORE, M.D.....	Associate
--------------------------------	-----------

A complete course is given in this subject by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

#### DERMATOLOGY

RANDOLPH BRYAN CARMICHAEL, M.D.....	Professor
CHARLES AUGUSTUS SIMPSON, M.D.....	Associate

The lectures in this course will be principally clinical, supplemented by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

MEDICAL JURISPRUDENCE

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.....Professor

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

SURGERY

WILLIAM CLINE BORDEN, M.D.....Professor

DANIEL KERFOOT SHUTE, M.D....Clinical Professor of Ophthalmology

CHARLES WILLIAMSON RICHARDSON, M.D.,

Professor of Laryngology and Otology

AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery

FRANCIS RANDALL HAGNER, M.D. Professor of Genito-Urinary Diseases

ARTHUR AUGUSTIN SNYDER, M.D.....Clinical Professor of Surgery

JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery

WILLIAM KENNEDY BUTLER, M.D.....Professor of Ophthalmology

LUTHER HALSEY REICHELDERFER, M.D...Clinical Professor of Surgery

LOUIS ANATOLE LA GARDE, M.D.....Professor of Military Surgery

OSCAR ADDISON MACK MCKIMMIE, M.D.,

Clinical Professor of Laryngology and Otology

DANIEL WEBSTER PRENTISS, M.D.....Clinical Associate in Surgery

CHARLES STANLEY WHITE, M.D.....Associate in Surgery

WILLIAM FRANCIS MATTINGLY SOWERS, M.D.....Associate in Surgery

EDWARD GRANT SEIBERT, M.D.....Instructor in Ophthalmology

HOBART SOUTHWORTH DYE, M.D.,

Instructor in Laryngology and Otology

EDWARD THOMAS MURDAUGH FRANKLIN, M.D....Instructor in Surgery

CHARLES WILBUR HYDE, M.D.....Instructor in Surgery

CLINE N. CHIPMAN, M.D.....Instructor in Surgery

HARRY HYLAND KERR, M.D.....Instructor in Surgery

WILLIAM HENRY HUNTINGTON, M.D.,

Instructor in Laryngology and Otology

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the

patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anaesthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown.

Ward clinics and bedside instruction are made a prominent part of the course. The classes are divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals and dispensaries. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Practical work is required of each student in the preparation of dressings and sterilization of instruments. Each student is required to give, under instruction, at least six anaesthesias and to assist in at least six operations.

In the fourth year a thorough course is given in operative surgery.

SUBJECT	YEARS	HOURS	
		Total Didactic and Clinical	Didactic not to exceed
Surgery.....	II, III, IV		
General Surgery.....		540	144
Minor Surgery.....		40	20
Surgical Pathology.....		12	12
Radiography.....		16	0
Fractures, etc.....		16	16
Military Surgery.....		8	8
Ophthalmology.....		64	16
Laryngology and Otology.....		60	24
Genito-Urinary Surgery.....		48	16
Orthopedics.....		48	16
		— 852	— 272

#### SURGICAL PATHOLOGY

WILLIAM FRANCIS MATTINGLY SOWERS, M.D..... Associate

Surgical pathology is taught by thorough instruction in the gross and microscopic appearance of surgical diseases and injuries, and by a systematic course of lectures and quizzes by which the etiology, pathology, symptomatology, and treatment of the surgical affections and their relations to each other are shown.



# ORTHOPEDICS

AURELIUS RIVES SHANDS, M.D.....Professor

A course of lectures and recitations on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

# GENITO-URINARY DISEASES

FRANCIS RANDALL HAGNER, M.D.....Professor

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

# MILITARY SURGERY

LOUIS ANATOLE LA GARDE, M.D.....Professor

The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from the Army Medical School.

# OPHTHALMOLOGY

WILLIAM KENNEDY BUTLER, M.D.....Professor

DANIEL KERFOOT SHUTE, A.B., M.D.....Clinical Professor

EDWARD GRANT SEIBERT, M.D.....Instructor

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

# LARYNGOLOGY AND OTOTOLOGY

CHARLES WILLIAMSON RICHARDSON, M.D.....Professor

OSCAR ADDISON MACK McKIMMIE, M.D.....Clinical Professor

EDWARD GRANT SEIBERT, M.D.....Instructor

HOBART SOUTHWORTH DYE, M.D.....Instructor

WILLIAM HENRY HUNTINGTON, M.D.....Instructor

The course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

## OBSTETRICS

ALBERT FREEMAN AFRICANUS KING, A.M., M.D., LL.D.....	Professor
JULIAN MAYO CABELL, M.D.....	Clinical Professor
W. SINCLAIR BOWEN, M.D.....	Clinical Professor
HURON WILLIS LAWSON, S.B., M.D.....	Associate Professor
ELIJAH WHITE TITUS, M.D.....	Instructor

The course in Obstetrics comprises a series of lectures on the science and art of midwifery, together with practical work. The chief purpose of the lecturer is to arrange, simplify, and explain the matters studied in the text-books so as to render them more easily intelligible and to indicate their relative importance. The lectures are illustrated by diagrams, models, manikins, natural preparations, and instruments. The class is divided into sections, and each student performs various obstetrical operations upon the manikin and receives practical instruction in external pelvimetry and the methods of abdominal palpation and auscultation during pregnancy. Recitations from text-books are held throughout the term. In the fourth year clinical instruction in obstetrics is given, the class being divided into small sections, each section being given bedside instruction, and the individual students being required to attend a stated number of cases.

The out-patient obstetrical service is large and thoroughly organized for instruction. Cases are usually referred several weeks before the expected date of confinement. Each case is promptly investigated by the instructor in charge and assigned to a student who in company with the instructor visits and examines the patient as soon as practicable and thereafter visits the patient at intervals of one week, and attends the case during labor. Students make post-partum visits daily for four days and every other day thereafter until the case is discharged by the instructor.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Clinical	Didactic not to exceed
Obstetrics.....	III and IV	192*	64

## GYNECOLOGY

JOHN WESLEY BOVÉE, M.D.....	Professor
ALBERT LIVINGSTON STAVELY, M.D.....	Clinical Professor
GIDEON BROWN MILLER, M.D.....	Associate
WALTER ASHBY FRANKLAND, M.D.....	Associate
J. LEWIS RIGGLES, M.D.....	Associate
VIRGIL B. JACKSON, M.D.....	Instructor
DANIEL LERAY BORDEN, M.D.....	Instructor

\* The total number of clinic hours cannot be given, as each student is required to attend ten cases, exclusive of the demonstration work and Ward and Dispensary Clinics above enumerated.

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater and ward clinics given by the Professor of Gynecology and his assistants.

SUBJECT	YEARS	HOURS	
		Total Didactic and Clinical	Didactic not to exceed
Gynecology.....	III and IV	144	48

#### HYGIENE

EDGAR PASQUAL COPELAND, M.D.....Professor

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

SUBJECT	YEAR	HOURS	
		Total Didactic and Clinical	Didactic not to exceed
Hygiene.....	II	32	32

#### CLINICAL FACILITIES

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

##### University Hospital and the University Dispensary

*H Street, between Thirteenth and Fourteenth Streets N. W. and adjacent to the Medical Building.*—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Medical School, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical work. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually.

The staff is composed of members of the Faculty of Medicine.

##### Garfield Memorial Hospital

*Florida Avenue and Tenth Street N. W.*—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital.

Members of the Faculty on the visiting staff: Professors CLAYTOR, MACKALL and MORGAN, Clinical Medicine; Professors SNYDER, WELLINGTON, and REICHELDERFER, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician; Drs. CABELL and BOWEN, Clinical Obstetrics.

#### Children's Hospital

*W Street, between Twelfth and Thirteenth Streets N. W.*—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department, to which students are regularly assigned for clinical instruction.

Members of the Faculty on the visiting staff: Professors KING and YARROW, Consulting Physicians; Professor WELLINGTON, Clinical Surgery; Professor ACKER and Drs. COPELAND, DONNALLY, and LEECH, Clinical Medicine.

#### Emergency Hospital and Central Dispensary

*Fifteenth Street and Ohio Avenue N.W.*—This hospital has 36 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in Clinical surgery, particularly in fractures and dislocations which are taught in regular clinics by the instructor in this subject.

Members of the faculty on the visiting staff: Professors HAGNER, Clinical Genito-Urinary Diseases; Drs. WHITE, PRENTISS, D. L. BORDEN and JACKSON, Surgery; Professor MORGAN and Dr. ELLIOTT, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

#### Columbia Hospital for Women

*Twenty-fifth Street and Pennsylvania Avenue N. W.*—This hospital has 68 charity beds for diseases peculiar to women, and 50 charity maternity beds. Both the obstetrical and the gynecological services are particularly good and are fully utilized for students.

Members of the Faculty on the visiting staff: Professor BOVÉE and Dr. MILLER, Clinical Gynecology; Drs. KELLY, BOWEN, CABELL and RIGGLES, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

#### The Government Hospital for the Insane

This hospital is maintained by the United States Government. It has 2,500 beds. Clinical instruction in mental diseases is given by the



superintendent of the hospital, Professor W. A. WHITE, and Drs. SCHWINN and GLUECK. Other members of the Faculty on service at this hospital are Professor FRANZ; Professor SHUTE, Consulting Ophthalmologist; Professors RUFFIN, and MORGAN, Consulting Physicians.

#### Episcopal Eye, Ear, Throat, and Nose Hospital

*Fifteenth Street, between L and M Streets N. W.*—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Drs. McKIMMIE, DYE and HUNTINGTON, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

#### Lutheran Dispensary

*Fourteenth and N Streets N. W.*—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.

Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

#### Casualty Hospital

*Massachusetts Avenue N. E.*—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Dr. BARNES, Clinical Medicine.

#### Tuberculosis Hospital

*Fourteenth and Upshur Streets N. W.*—Members of the Faculty on its staff: Professors CLAYTOR and RANDOLPH, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

### CLASSIFICATION AND ADVANCEMENT OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

*Proficiency* in all subjects is marked on the scale of 100.

*Examinations* are held at the end of the course in each subject.

In determining the proficiency of a student his laboratory and clinical work, his quiz record, attendance, and result of examination are all considered.

To be *advanced* a student must obtain a general average of 75 or more in all subjects of the year, and must not fail in more than one major or two minor subjects.

Students who obtain a general average of 75 or more, but who fail in not more than one major or two minors, may be advanced *conditioned* and may be permitted at the next examination period a re-examination in the subjects in which they fail, but all conditions must be removed before a student can be again advanced.

Students who fail of advancement or graduation will not be allowed re-examination, except by special permission of the Faculty, and must repeat all subjects in which they obtained less than 85 during the year, and pass an examination on all majors of preceding years in which they obtained less than 85 before they can be advanced or graduated. Students who fail to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty. In special examinations a fee of \$5 will be charged for each subject. Students who fail to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses. Students will not be admitted to examination unless they have paid all fees due at the time.

A student who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

#### REQUIREMENTS FOR GRADUATION

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of 32 weeks each in four separate years; must have satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

#### PRIZES

A prize from the Ordranax Prize Endowment will be awarded under conditions determined by the University authorities.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

### HOSPITAL APPOINTMENTS

Internes are annually appointed in the University Hospital. These appointments are made upon competitive examinations under conditions determined by the governing authorities of the Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

### FEES AND CONTINGENT EXPENSES

1. Matriculation (payable but once).....	\$5
2. Annual library fee.....	3
3. Tuition fee per annum, including all charges for materials	150
4. Graduation fee.....	10
5. Fee for a certificate under the seal of the University.....	2

A deposit of \$10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use.....	\$5
Microscope for Bacteriological, Pathological, and Clinical	
Microscopy Laboratory use.....	6

Matriculation, library, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond of \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Dean.

### WITHDRAWALS

*Withdrawals will be granted only on recommendation of the Dean and the approval of the President.*

A certificate of work actually done will be given to any student granted a withdrawal or a transfer to another school during the session. A written request for withdrawal or transfer must be filed with the Dean and no permission to withdraw or transfer, and no certificate of work done will be given a student unless all fees and dues chargeable against him up to the end of the month in which he withdraws have been paid.

#### BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

---

For catalogues, application blanks, and further information, address

THE DEAN

*Medical School,*

*The George Washington University,*

*1325 H Street N. W., Washington, D. C.*



## DENTAL SCHOOL

### FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY  
JOHN ROLAND WALTON, D.D.S.,

Dean and Professor of Prosthetic Dentistry and Orthodontia

DANIEL KERFOOT SHUTE, M.D. ....Professor of Neuro-Anatomy

HENRY CLAY THOMPSON, D.D.S. ....Professor of Operative Dentistry

CHARLES EDWARD MUNROE, Ph.D., LL.D. ....Professor of Chemistry

SHEPHERD IVORY FRANZ, Ph.D. ....Professor of Physiology

CHARLES STANLEY WHITE, M.D. ....Clinical Professor of Oral Surgery

JOHN BRADFORD BRIGGS, M.D. ....Professor of Bacteriology and Pathology

ARTHUR BARTON CRANE, D.D.S. ....Professor of Oral Surgery

NOBLE PRICE BARNES, M.D.,

Associate Professor of Materia Medica and Therapeutics

JOHN ROBERT DE FARGES, D.D.S., ....Associate Professor of Dental

Metallurgy, Jurisprudence, Economics, and Ethics

CHARLES TURK BASSETT, D.D.S.,

Associate Professor in Charge of the Dental Infirmary

ALLEN SCOTT WOLFE, D.D.S.,

Associate Professor of Crown and Bridge Work

CADMUS LINDEN ODOR, D.D.S.,

Associate Professor of Operative Technics

WILLIAM FRANCIS LAWRENCE, D.D.S.,

Associate Professor of Prosthetic Technics

D. DEWITT BEEKMAN, D.D.S.,

Associate Professor of Materia Medica and Therapeutics

FRANK ADELBERT HORNADAY, S.B., M.D.,

Associate Professor of Chemistry

HENRY KNOX CRAIG, M.D.,

Associate Professor of Bacteriology and Pathology

GEORGE MILLER SHARP, D.D.S.

Associate Professor of Orthodontia and Lecturer on Oral Prophylaxis

EUGENE ROGER STONE, D.D.S. ....Associate Professor of Oral Surgery

HARRY RANDALL ELLIOTT, M.D. ....Associate in Physiology

JOHN WINSLOW TAYLOR, D.D.S., ....Instructor in Prosthetic Technics

CHARLES GARDNER SHOEMAKER, D.D.S.,

Instructor in Operative Technics

HENRY CISSEL YOUNG, D.D.S., ....Instructor in Prosthetic Technics

HERBERT CORNWELL HOPKINS, D.D.S. ....Lecturer on Orthodontia

ALBERT PERKINS TIBBETS, M.D. ....Instructor in Anatomy

JAMES WALTER BERNHARD, D.D.S.,

Instructor in Crown and Bridge Work

## GENERAL STATEMENT

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The next academic year begins on Wednesday, September 30, 1914, and ends on Wednesday, June 9, 1915. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. For further information communicate with the Dean of the Dental School.

## ADMISSION

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments or they must pass an examination.

Candidates are admitted without examination:

1. Upon presenting a diploma or certificate of graduation from a four-year high school, or an equivalent certificate or diploma.
2. Upon presenting a certificate of admission to the Freshman class of a college having like admission requirements.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement for graduation from an accredited four year high school.

Latin and Physics are required. An applicant deficient in either subject or both may be admitted to the first-year class conditioned, but conditions must be made up during the first year.

The scope of the different subjects is indicated in standard high school text-books.

A candidate may offer certificates of an approved school for work done in any preparatory subjects, and will be credited with the units represented by such work. A candidate failing to pass in two or three subjects of his examination may be admitted to the first year upon the condition that he make up the deficiency before entering the second-year class. The examinations are conducted by examiners appointed by the Superintendent of Schools of the District of Columbia.

The examinations for admission will be held in June and September, at the Dental School.

## COURSE OF INSTRUCTION

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Anatomy. Physiology. General Chemistry. Histology. Operative Technics. Prosthetic Technics. Special Anatomy.	Organic Chemistry. Operative Dentistry. Prosthetic Dentistry. Pathology. Materia Medica Operative Technics. Prosthetic Technics. Infirmary Practice. Bacteriology. Dental Histology. Orthodontia Technics. Infirmary Practice. Clinics.	Operative Dentistry. Orthodontia. Prosthetic Dentistry. Comparative Dental Anatomy. Oral Surgery. Orthodontia Technics. Metallurgy. Prosthetic Technics. Infirmary Practice. Dental Therapeutics. Dental Pathology. Dental Bacteriology. Oral Prophylaxis. Dental Jurisprudence, Economics and Ethics. Infirmary Practice. Clinics.

These studies are further described in the following pages.

Hours of recitation, daily from 4.50 p.m. to 10.30 p.m.; 6.30 to 7.30 p.m., dinner hour.

## PROSTHETIC DENTISTRY AND ORTHODONTIA

JOHN ROLAND WALTON, D.D.S.....Professor  
GEORGE MILLER SHARP, D.D.S.....Associate Professor

1. *Prosthetic Dentistry*.—All branches in this department will be under the supervision of the professor. He will deliver the lectures and manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

2. *Orthodontia*.—Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliances upon models and practically correct cases of irregularity.

## OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY

HENRY CLAY THOMPSON, D.D.S.....Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technics and the infirmary.

## CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor

FRANK ADELBERT HORNADAY, S.B., M.D. ....Associate Professor

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

## PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph.D.....Professor

JOSEPH DUERSON STOUT, A.B., M.D.....Associate Professor

HENRY RANDALL ELLIOTT, M.D.....Associate

This subject is taught in lectures, recitations, and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental medicine and surgery, especially digestion, secretion, and the nervous system. Three laboratory periods a week during a semester give the student first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

## ANATOMY

CARL LAWRENCE DAVIS, M.D.....Professor

OSCAR BENWOOD HUNTER, M.D.....Associate Professor



The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and stereopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

#### MATERIA MEDICA AND THERAPEUTICS

NOBLE PRICE BARNES, M.D..... Associate Professor  
D. DEWITT BEEKMAN, D.D.S..... Associate Professor

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopoeia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

#### ORAL SURGERY

CHARLES STANLEY WHITE, M.D..... Clinical Professor  
ARTHUR BARTON CRANE, D.D.S..... Professor  
EUGENE ROGER STONE, D.D.S..... Associate Professor

Instruction in this subject consists of a systematic course of lectures, followed by recitations, and clinical teaching is carried on in the Infirmary and Hospital Dispensary. Amphitheatre clinics are given in the University and other hospitals to which the members of the Faculty are attached. A free bed in the University Hospital is at the disposal of this department. Operations and demonstrations on the cadaver form a valuable part of the course.

The lectures deal with applied anatomy, surgical bacteriology and pathology, surgical technique, wounds, hemorrhage, shock, surgical

diseases and injuries of the face, mouth and jaws, extraction of teeth and local and general anesthesia.

Students are expected to attend the amphitheatre clinics when notified and are required to present at least one case—history as a prerequisite to examination.

*Text-Books and Works of Reference.*—Blair, Surgery and Diseases of the Mouth and Jaws; Scudder, Tumors of the Jaws; Winters, Exodontia; Hewitt, Anesthetics.

### HISTOLOGY

OSCAR BENWOOD HUNTER, M.D. .... Professor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

### PATHOLOGY AND BACTERIOLOGY

JOHN BRADFORD BRIGGS, S.B., M.D. .... Professor

HENRY KNOX CRAIG, M.D. .... Associate Professor

J. A. F. PFEIFFER. .... Special Instructor

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

### PROSTHETIC TECHNICS

WILLIAM FRANCIS LAWRENCE, D.D.S. .... Associate Professor  
JOHN WINSLOW TAYLOR, D.D.S. .... Instructor  
HENRY CISSEL YOUNG, D.D.S. .... Instructor

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and artistic arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in taking impressions, making models, dies, and casting; swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridge work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the Department is under the immediate supervision of the associate professor.

### OPERATIVE TECHNICS

CADMUS LINDEN ODOR, D.D.S. .... Associate Professor  
CHARLES GARDNER SHOEMAKER, D.D.S. .... Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy, and the forms and surface markings of each tooth studied, the natural teeth, as well as enlarged

models and drawings being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surface of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each student is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary.

#### COMPARATIVE DENTAL ANATOMY

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

#### CROWN AND BRIDGE WORK, GOLD INLAY, AND PORCELAIN

ALLEN SCOTT WOLFE, D.D.S.....Associate Professor  
JAMES WALTER BERNHARD, D.D.S.....Instructor

Instruction in this course is systematically given by lectures and clinics. The course in technic extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

#### METALLURGY

JOHN ROBERT DEFARGES, D.D.S.....Associate Professor

The subject of Metallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

#### PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE, AND ECONOMICS

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients, the duty of upholding the honor and dignity of the profession, and the differences between the profession and business or manufacturing pursuits.



The lectures on jurisprudence will follow the text-book by Dr. Reh-fuss, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anaesthetics, the penalties, etc.

*Economics.*—This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentist, fees, book and card systems, and the general economy in conducting an office.

#### ORAL PROPHYLAXIS

GEORGE MILLER SHARP, D.D.S. .... Lecturer

This subject will be taught didactically, and clinically practical work by the students in the treatment of the oral cavity will be required.

#### THE DENTAL INFIRMARY

CHARLES TURK BASSETT, D.D.S. .... Associate Professor in Charge  
JOHN WINSLOW TAYLOR, D.D.S. .... Demonstrator  
HENRY CISELL YOUNG, D.D.S. .... Demonstrator  
EUGENE ROGERS STONE, D.D.S. .... Demonstrator

The Infirmary is open every week-day the entire year. An abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the demonstrator in charge, who is present from 1 until 5 o'clock.

#### CLINICAL STAFF

CAESARE LOUIS CONSTANTINI, D.D.S. .... Clinician in Charge  
ARTHUR DURDAN WEAKLEY, D.D.S. .... Dentistry  
THOMAS LOCKE RUST, D.D.S. .... Dentistry  
GEORGE BERTRAM ROPER MACDONALD, D.D.S. .... Dentistry  
WILLIAM CARL KILLINGER, D.D.S. .... Orthodontia  
GEORGE MILLER SHARP, D.D.S. .... Special Crown Work  
ZENAX WILBUR ALDERMAN, D.D.S. .... Electro-Therapeutics  
ROBERT EDWIN LAYTON, D.D.S. .... Dentistry

#### TEXT-BOOKS AND WORKS OF REFERENCE

(The works first named and in *italics* are preferred.)

*Anatomy.*—Cunningham's *Text-book of Anatomy*; Cunningham's *Manual of Practical Anatomy*; Black's *Dental Anatomy*.

*Physiology*.—Text-books: Haliburton's *Physiology*; Howell's *Physiology*; Tigerstedt's *Physiology*.

*Pathology and Bacteriology*.—Delafield and Prudden's *Pathology*; Jordan's *Bacteriology*.

*Chemistry*.—Simon's *Chemistry*; Barha's *College Chemistry*; Holland's *Medical Chemistry*.

*Materia Medica*.—H. C. Wood's *Therapeutics*; Hare's *Practical Therapeutics*; A. A. Stevens' *Modern Materia Medica and Therapeutics*; Culbreath's *Materia Medica and Pharmacy*; National Dispensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopoeia and National Formulary; Prinz's *Dental Materia Medica and Therapeutics*; Modern *Dental Materia Medica*; Buckley's *Therapeutics and Pharmacology*; Dorland's *Medical Dictionary*.

*Prosthetic Dentistry*.—*The American Text-Book of Prosthetic Dentistry*; Essig's *Dental Metallurgy*.

*Operative Dentistry*.—Kirk's *Operative Dentistry*; Black's *Principles of Practice*; Tome's *Dental Anatomy and Surgery*; Taft's *Operative Dentistry*; Litch's *American System of Dentistry*; Johnson's *Operative Dentistry*.

*Oral Surgery*.—Blair's *Surgery and Diseases of the Mouth and Jaws*; Scudder's *Tumors of the Jaws*; White's *Exodontia*; DeWitt's *Anaesthetics*.

*Histology*.—Nichols, Bohm and Davidoff's *Histology*; Bromell's *Anatomy and Histology of the Mouth*.

*Orthodontia*.—Angle's *Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ*; Talbot's *Irregularities of the Teeth*; Jackson's *Orthodontia*.

*Dental Jurisprudence*.—Rehfuss's *Dental Jurisprudence*.

*Dental Pathology and Therapeutics*.—Burchard's *Dental Pathology and Therapeutics*.

*Comparative Dental Anatomy*.—Thompson's *Comparative Dental Anatomy*.

#### GRADUATION

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this School, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be re-examined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this School, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the demonstrators in charge with a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures will preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

#### COURSES IN ARTS AND SCIENCES

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours a week.

#### LOCATION

The Dental Building is No. 1325 H Street N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 724 9th Street N. W., on any week day, and also at the Dental Building, 1325 H Street N. W., on Tuesday and Thursday of each week at 4.30 p.m. during the session.

#### FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable once).....	\$5
2. Annual library fee.....	2
3. Tuition fee per annum, including all charges for materials.....	125
4. Fee for graduation.....	10
5. Fee for a certificate under the seal of the University.....	2
6. A deposit of \$10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.	

No registration will be accepted for less than a full semester, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use.....	\$5
Microscope for bacteriological, pathological, and clinical microscopy laboratory use.....	6

The cost of instruments for the first year amounts to about \$20, and the cost of text-books to about \$30.

#### PAYMENT OF FEES

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. Fees are payable at the office of the Treasurer, 2024 G Street, or at the office of the Medical School, 1325 H Street.

#### BOARD AND ROOMS

A register of boarding-houses is kept by the Treasurer. Accommodations cost from \$25 to \$40 a month.

---

For catalogues, application blanks and further information, address  
J. ROLAND WALTON, D.D.S., *Dean*,  
724 9th Street N. W.



## **PART III**

### **ASSOCIATED COLLEGES**

**NATIONAL COLLEGE OF PHARMACY  
COLLEGE OF VETERINARY MEDICINE**

Institutions in the District of Columbia organized as corporations under the Charter of the University, having separate financial foundations but educationally forming a part of the system of the University.



# NATIONAL COLLEGE OF PHARMACY

## OFFICERS AND TRUSTEES

### *President*

CHARLES H. STOCKTON, LL.D.

### *Dean and Chairman*

HENRY E. KALUSOWSKI

### *Vice-Chairman*

LEWIS FLEMER

### *Secretary*

WYMOND H. BRADBURY

### *Treasurer*

H. C. EASTERDAY

### *Trustees*

With date of expiration of term of office

CHARLES B. CAMPBELL, 1914  
HERBERT C. EASTERDAY, 1914  
LEWIS FLEMER, 1914  
WILLARD S. RICHARDSON, 1914  
FRANK C. HENRY, 1915  
SAMUEL L. HILTON, 1915

HENRY E. KALUSOWSKI, 1915  
WILLIAM T. KERFOOT, 1915  
WYMOND H. BRADBURY, 1916  
SAMUEL M. WAGNER, 1916  
CHARLES E. GROSS, 1916  
FRANK P. WELLER, 1916

## FACULTY OF THE NATIONAL COLLEGE OF PHARMACY

CHARLES HERBERT STOCKTON, LL.D. . . . PRESIDENT OF THE UNIVERSITY  
HENRY E. KALUSOWSKI, M.D., Phar.D., Dean, and Professor of Pharmacy  
HENRY H. HAZEN, S.B., M.D.

Professor of Materia Medica, Botany, and Toxicology  
GEORGE A. MENGE, Ph.D. . . . . Professor of Chemistry and Physics  
HOWARD M. BRADBURY, Phar.D. . . . . Professor of Analytical Chemistry  
BURTON J. HOWARD, S.B. . . . . Professor of Microscopy  
HENRY B. FLOYD, Phar.D. . . . . Professor of Mercantile Pharmacy  
ALEXANDER MUNCASTER, Phar.D., LL.M.,

Professor of Pharmaceutical Jurisprudence  
DOUGLAS TSCHIFFLEY, Phar.D. . Assistant to the Professor of Pharmacy  
LORING W. BEESON, Phar.D.,

Assistant to the Professor of General Chemistry  
HOMER K. BUTLER, Phar.D.,

Assistant to the Professor of Analytical Chemistry

## CALENDAR

## 1914

September 17, *Thursday*—Admission Examination begins at 1 p.m. in the Lecture Room of the College.

September 23, *Wednesday*—Forty-third Session begins.

November 26, *Thursday*—Thanksgiving Day, a holiday.

Recess from December 22, 1914, to January 4, 1915

## 1915

February 22, *Monday*—a holiday.

May 12, *Wednesday*—Annual Examinations for promotion and graduation begin.

June 10, *Wednesday*—Commencement.

## GENERAL STATEMENT

The National College of Pharmacy, which is the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, was chartered under the provisions of an act of Congress in 1872, and opened its doors to students November 11 of that year. In February, 1906, it became a member of the educational system of The George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy, and the College is represented in the President's Council by its Dean.

The work of the College embraces courses in chemistry, botany, physiology, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The College building is centrally located on I street northwest between Eighth and Ninth streets. It is easily reached by the principal street car lines of the city.

## Preliminary Education and Examination

The College requires of its Matriculants a knowledge of the branches usually taught in the public schools of Washington, D. C., to the extent of *three years in the high schools or its equivalent*, and they must be at least seventeen years of age. Evidence of this may be shown by certificates from reputable teachers or by the results of an examination to be held at the College, at one o'clock p.m., THURSDAY, September 17, 1914.

Beginning with the session of 1916-17, candidates will be required to have four years' high school instruction or its equivalent.



### SPECIAL COURSES

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

### THE DEGREE

The degree conferred is *Doctor of Pharmacy*.

### QUALIFICATIONS FOR THE DEGREE

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, Physiology, Toxicology; and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.

2. He must have passed a satisfactory examination in each of the branches taught.

3. He must be recommended by the Board of Examiners.

### MATERIA MEDICA, BOTANY, PHYSIOLOGY AND TOXICOLOGY

#### Freshman Course

Introduction to the study of Botany, Evolution, Properties of Living organisms, Growth of Plants, Internal Structure and Physiology of plants will receive proper attention, followed by a description of the Natural and Artificial systems of Botany.

Following will be a course of instruction in Animal Physiology, to include Body Tissues, Bone, Fibre, Cartilage, Muscle, Epithelium, Serous Tissue, Nerve Tissue, Blood and the Circulation.

#### Junior Course

Causes of disease, Trauma, Poisons introduced from without, the Bacteria, Immunity.

General Principles of Therapeutics, Rules for Dosage, Standardization of Drugs, to be followed in their regular order, the study of Drugs, classified according to their general or local effects.

#### Senior Course

General review of the Junior year work and continuation of the study of drugs, to include the coal tar group, toxins and anti-toxins vaccines Bacterins. Use of drugs hypodermically. This course to conclude with a special course of instruction in Toxicology.

### PHARMACY

#### Freshman Course

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on

metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination, granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

#### Junior Course

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, following by carbon, boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury; antimony, arsenic, bismuth, and gold.

#### Senior Course

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products used in pharmacy, vegetable oils, soaps, and products from resins.

### ANALYTICAL CHEMISTRY

The instruction in this Department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this Department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the test of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

## GENERAL CHEMISTRY AND PHYSICS

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

## MICROSCOPY

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distinguished from another as well as to the detection and identification of the most common adulterants used.

## MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE

Attendance upon these courses is required from the Senior class only.

## FEES

Matriculation.....	\$5
Tickets for the full year's course of instruction, Freshman .....	80
Tickets for the full year's course of instruction, Junior .....	85
Tickets for the full year's course of instruction, Senior.....	90
Single tickets for Chemistry, Materia Medica, Botany, and Toxicology, each.....	20
Single tickets for Analytical Chemistry.....	25
Single tickets for Practical Pharmacy .....	25
Single tickets for Microscopy.....	20
Single tickets for Mercantile Pharmacy.....	10
Single tickets for Pharmaceutical Jurisprudence.....	10
Fee for Diploma.....	10

For further information consult the Dean, HENRY E. KALUSOWSKI, 808 I Street N. W.

# COLLEGE OF VETERINARY MEDICINE

## BOARD OF TRUSTEES

J. A. T. HULL	DAVID EASTBURN BUCKINGHAM, V.M.D.
H. ROZIER DULANY	JOHN LOCKWOOD, D.V.S
WILLIAM CORCORAN EUSTIS	JOHN POLLARD TURNER, V.M.D.

## FACULTY

CHARLES HERBERT STOCKTON, LL.D.....	PRESIDENT OF THE UNIVERSITY
DAVID EASTBURN BUCKINGHAM, V.M.D.....	Dean, Professor of Materia Medica, Therapeutics and Canine Practice.
CHARLES EDWARD MUNROE, Ph.D., LL.D.....	Professor of Chemistry
JOHN LOCKWOOD, D.V.S.....	Professor of Veterinary Surgery
JOHN POLLARD TURNER, V.M.D.,	Professor of Theory and Practice of Veterinary Medicine
JOHN BRADFORD BRIGGS, S.B., M.D.	Professor of Bacteriology and Pathology
OSCAR BENWOOD HUNTER, M.D.,	Professor in Histology and Embryology
JOHN M. BUCK, D.V.M. ....	Assistant Professor of Veterinary Anatomy
OTIS DOW SWETT, S.M., LL.M. ....	Assistant Professor of Chemistry
MAURICE C. HALL, S.B., A.M.,	Assistant Professor of Zoölogy and Parasitology
RALPH J. CARR, B.Sc. ....	Assistant Professor in Feeds and Feeding
WILLIAM W. BRIDE, A.B., LL.B..	Lecturer on Veterinary Jurisprudence
HARRY C. CRAIG, M.D.....	Instructor in Bacteriology and Pathology
TUNIS HICKS, D.V.M.....	Instructor in Veterinary Anatomy
CHAUNCEY M. GRUBB, D.V.M.....	Instructor in Dairy Inspection and Milk Hygiene, Dentistry and Obstetrics
HARRY A. LOCHBOEHLER, D.V.M.,	Instructor in Veterinary Materia Medica and Therapeutics
G. M. POTTER, D.V.M.....	Instructor in Special Pathology, Infectious Diseases and Meat Inspection
FRANK ALMON HUGINS, D.V.M.....	Instructor in Horseshoeing
WALTER B. JESSEE, S.B.,	Instructor in Breeds and Breeding and Judging, and Zoötechnics
ARTHUR A. EISENBERG, A.B., M.D.....	Instructor in Physiology
HARRY H. FETTER, Ph.G.....	Instructor in Pharmacy and Botany
EDWIN H. INGERSOLL, S.B.....	Instructor in Physiological Chemistry



### REQUIREMENTS FOR ADMISSION

Students presenting a diploma from any recognized college, normal or high school are eligible to admission without examination.

Students not having the above qualifications will be required to pass an examination equivalent to a 2d grade Civil Service Examination, supplemented by History and Geography of the United States and its possessions. (U. S., B. A. I. Circular No. 150).

### ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students of other recognized and approved veterinary schools may be admitted to this school as follows:

Those qualified to enter the second year of such a school may be admitted to the second-year class of this school, those qualified to enter the third year of their own school to the third year of this school; provided, however, that the subjects pursued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years in this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

### EVIDENCE OF ATTENDANCE

At the end of the college year each student is entitled to a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college. (U. S. B. A. I. Cir. 150).

### ADVANCED STANDING

Advanced standing will be given for degrees in Medicine, Dentistry, or Veterinary Medicine.

Students holding degrees in Arts, Science, Philosophy, or Agriculture who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology, equivalent to the courses in these subjects in this college, may upon satisfactory evidence of their proficiency be credited with such studies; provided, however, that such students shall devote two years' study in veterinary medicine, the last year of which is passed in this College.

### SPECIAL STUDENTS

Students, approved by the Dean, not candidates for the degree of Doctor of Veterinary Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree

of Doctor of Veterinary Medicine. Nor can such students enter upon the regular veterinary course without complying with all the regular requirements for admission.

### CLASSIFICATION OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz., first, second, third and fourth year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a re-examination in the subjects in which they fail. The Faculty may dismiss any student from the College, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise, for the profession of veterinary medicine.

### ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Anatomy	Anatomy	Theory and	Theory and
Histology	Physiological	Practice	Practice
Embryology	Chemistry	Bacteriology	Small Animal
Chemistry and	Pharmacy	Pathology and	Practice
Physics	Physiology	Laboratory	Surgery and
Laboratory	Hygiene	Diagnosis	Restraint
Chemistry	Breeds and	Surgery and	Therapeutics
Materia Medica	Breeding and	Restraint	Obstetrics
and Toxicology	Judging	Therapeutics	Veterinary
Botany	Dairy Inspection	Dentistry	Jurispru-
Zoology	and Milk	Parasitology	dence
	Hygiene	Soundness and	Control of
	Feeds and Feed-	Lameness	Infective
	ing	Shoeing and	Diseases
	Clinics	Balancing	Meat Inspec-
		Clinics	tion and P.
			M. Exami-
			nation
			Clinics

For lecture, laboratory and dissecting hours a schedule card is furnished.

Clinical work in the veterinary and canine hospitals connected with the College and at abattoirs and stock and dairy farms is required of second, third and fourth year students.

## ANATOMY

JOHN M. BUCK, D.V.M..... Assistant Professor  
TUNIS HICKS, D.V.M..... Instructor

The instruction in Anatomy is given in a series of lectures, demonstrations, recitations, and laboratory work, the latter being the most important.

The lectures are intended to present the general anatomical features of the horse and other domestic animals, and to point out the anatomical relations of the organs and parts of the body most subject to surgical operations.

The horse is used as the type subject in dissection, and every student is required to dissect all the parts of the horse, and such other of the domesticated animals, including the ox, sheep, swine, dog and cat, as may prove most expedient.

The laboratory is well supplied with all of the parts of the skeleton of the horse, and portions of the skeleton of various other domestic animals, for the work in osteology. Ample material is always available for the dissection of joints, muscles, viscera, and the vascular and nervous systems. The laboratory is also provided with a complete model of the horse, showing the relation of all the organs and parts of the body, for demonstrations in general and surgical anatomy. The course extends throughout the first and second years.

*Text-book.*—Sisson's Veterinary Anatomy.

## HISTOLOGY AND EMBRYOLOGY

OSCAR BENWOOD HUNTER, M.D..... Professor

These subjects are taught by a series of carefully correlated lectures, recitations, quizzes and demonstrations, and will include such instruction in microscopy as a working knowledge of the use of the simple and compound microscope and accessories, supplemented by the fundamental laws of optics; the method of preparing tissues for microscopic examination, and the technique of mounting.

Comparative histology will deal with the minute structure of the tissues and organs of various animals, including man. In addition to the microscopical demonstrations, lantern demonstrations will also be given.

Embryology under this head will present the salient features of the anatomy and physiology of the fecundated ovule up to the time of birth.

*Text-book.*—Bohm, Davidoff and Huber's Histology.

## PHYSIOLOGY

ARTHUR A. EISENBERG, A.B., M.D..... Instructor

The course in Physiology consists of lectures, demonstrations and laboratory exercises. The lectures cover all the important facts and theories regarding bodily functions of the animal, and are illustrated by diagrams, models and prepared specimens.

In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of nerves and muscles, and on the special senses of animals.

Special emphasis is laid on the relation of normal physiological functions to the disturbances of function in disease and upon the physiological action of drugs.

It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding course in Pathology, Therapeutics and General Veterinary Medicine.

*Text-book.*—Howell's Physiology, Smith's Veterinary Physiology.

### GENERAL CHEMISTRY

#### First Year

CHARLES EDWARD MUNROE, Ph.D., LL.D..... Professor  
OTIS DOW SWETT, S.M..... Assistant Professor

*General Chemistry.*—A series of illustrated lectures, accompanied by recitations and exercises on theoretical, inorganic, organic and technical Chemistry. The student is required to take notes on these lectures, which he must submit for examination.

*Laboratory Practice.*—A laboratory course for the study of the principles of chemistry which is designed to instruct students in the methods of conducting chemical experiments.

*Text-book.*—Holland's Medical Chemistry and Toxicology.

### PHYSIOLOGICAL CHEMISTRY

#### Second Year

EDWIN HENRY INGERSOLL, S.B..... Instructor

This course will consist of lectures and laboratory instruction, and includes the study of water from a sanitary standpoint; the chemical examination of milk, the tissues and fluids of the body; the isolation of the digestive enzymes, and a study of their action in vitro.

### MATERIA MEDICA AND THERAPEUTICS

DAVID EASTBURN BUCKINGHAM, V.M.D..... Professor  
HARRY A. LOCHBOEHLER, D.V.M..... Instructor

#### First Year

(1) Lectures upon and demonstrations of drugs and their preparations and doses used in veterinary practice will be followed by recitations to assist in memorizing. (2) Practical exercises will be given in prescription writing, also a short course in Veterinary Pharmacology.



**Third Year**

(1) Systematic lectures upon the physiological action of drugs and their effects in disease, their therapeutic uses, and their methods of administration to animals. (2) Prescription writing, in which students are given hypothetical cases for which to prescribe. (3) The therapeutic application of various agencies not drugs.

*Text-book.*—Winslow's Veterinary Materia Medica and Therapeutics.

**PRACTICE OF VETERINARY MEDICINE**

JOHN POLLARD TURNER, V.M.D.....Professor

This subject is taught by a series of lectures, recitations, quizzes and clinics extending over a period of two years.

The student is personally drilled in all the various diseases and doctrines taught in a well regulated veterinary school.

Especial attention is given to practical work whereby the student can become proficient in the diagnosis and treatment of disease.

Visits are required to the three veterinary hospitals in connection with the University, and personal attention is given students in visits to various large stables in and adjacent to the city of Washington, where practical instruction is given the third and fourth year classes in physical diagnosis among horses, cows and hogs.

Equal attention is given diseases of cattle as of horses, whereby the student is properly fitted for either city or country practice.

Diseases of food-producing animals will be thoroughly explained.

*Text-books.*—Freidberger and Froehner's Pathology and Therapeutics of Domestic Animals; Hutyra and Marek's Special Pathology and Therapeutics of Domestic Animals; Malkmus' Clinical Diagnosis; Glass' translation of Muller's Diseases of the Dog.

**VETERINARY SURGERY AND RESTRAINT**

JOHN LOCKWOOD, D.V.S.....Professor

The instruction given in this course embraces systematic lectures upon the principles and practice of Veterinary Surgery.

The different surgical operations are illustrated in clinic and upon the cadaver, and the uses of all the important surgical instruments and appliances are demonstrated in the same manner. The use of anesthetics, the practice of dental surgery, and castration on all domestic animals will receive special attention.

*Text-books.*—Moeller's Operative Veterinary Surgery; Fleming's Operative Veterinary Surgery; Hobday's Canine and Feline Surgery; Williams, Principles and Practice of Veterinary Surgery; Pfeiffer and Williams' Surgical Operations; White's Restraint of Domestic Animals; Merillat's Surgery.

## BACTERIOLOGY AND PATHOLOGY

JOHN BRADFORD BRIGGS, S.B., M.D.....Professor  
 HENRY KNOX CRAIG, M.D.....Instructor

*Bacteriology.*—This subject comprises laboratory instruction in the fundamental principles and methods of pure bacteriology. Thorough drilling is given in the preparation of culture media, in disinfection, sterilization, staining and the general methods of bacterial differentiation. Following this course, which is given daily during October, the further study of bacteria is taken up in connection with and as applied to pathology.

Pathology comprises the laboratory study of the general and special phenomena of inflammation, and a detailed study of the pathological processes found in the various diseases. The relation of bacterial and other microphytic life to disease processes and results is studied coincidentally and constitutes a course in applied bacteriology. In connection with the laboratory work a course of lectures and demonstrations is given upon immunity, serum therapy and protective inoculation.

*Surgical Pathology.*—A special course in the healing of wounds and injuries and in the pathology of surgical operations is given in the third and fourth years.

*Clinical Microscopy.*—Comprising the study of the various tissues, fluids, ejecta, and dejecta, with a view to diagnosis of diseased conditions, is given in the first part of the third year.

*Text-book.*—Delafield and Prudden's Pathology, Hiss and Zinsser's Text-book on Bacteriology.

## SPECIAL PATHOLOGY, TREATMENT AND CONTROL OF INFECTIOUS DISEASES

G. M. POTTER, D.V.M.....Instructor

The lectures in this course will be given with reference to the etiology, pathogenesis, symptoms, diagnosis, treatment and prevention of the infectious diseases. Local and national regulations and measures governing the control and eradication of diseases, with particular reference to the work of the United States Government in the eradication of infectious diseases will be clearly explained.

*Text-books.*—Huttyra and Marck's Special Pathology and Therapeutics of Domestic Animals, Volume I, translated by Mohler, Eichhorn and Fisher; Moore's The Pathology of Infectious Diseases of Animals; James Laws's Veterinary Medicine, Volume IV, third revised edition.

## BREEDS AND BREEDING AND JUDGING

WALTER B. JESSEE, S.B.....Instructor

The course covers the chief phases of live-stock work, including the judging, breeding and management of horses, cattle, sheep and swine.

It is introduced by discussions upon the origin of animal life, natural selections, the origin of breeds and the domestication of animals, as well as the principles of breeding, heredity, environment, selection, individual conformation and the history and development of breeds.

Students obtain practical experience in the judging of the various breeds and classes of animals, by visits to neighboring farms.

*Text-books.*—Plumb's Types and Breeds of Farm Animals; Goubaux and Barrier's Exterior of the Horse.

### FEEDS AND FEEDING

RALPH J. CARR, B.Sc.....Assistant Professor

This course will cover the principles of animal nutrition, balanced rations, practical feeding and the economical production of beef, milk, mutton and pork.

*Text-book.*—Henry's Feeds and Feeding.

### MILK HYGIENE AND DAIRY INSPECTION

CHAUNCEY M. GRUBB, D.V.M.....Instructor.

The course in Milk hygiene will be given by lectures and demonstrations throughout the second year. The students will be taught the theory of milk secretion, the composition and characteristics of milk, the various methods of testing, together with the chemistry and bacteriology of milk, abnormal forms of milk, and diseases transmissible through milk to bovines and human beings, with a study of the epidemics produced. Sanitary stabling and the sanitary handling of milk will be considered, showing the construction of various types of dairy barns and dairy houses, the manner of milking, care of the milk and the varieties and care of dairy utensils; also the study of sterilization and pasteurization.

*Text-books.*—Jensen's Milk Hygiene, translated by Pearson. Bulletin No. 56, Marine-Hospital Service, Milk and its Relation to the Public Health.

### MEAT INSPECTION AND POST-MORTEM EXAMINATION

G. M. POTTER, D.V.M.....Instructor  
FRANK ALMON HUGINS, D.V.M.....Instructor

The subject involves the control of food animals destined for slaughter; their ante-mortem and post-mortem inspection with reference to the diseases which affect the wholesomeness of the meat. Further, the preparation of meat-food products, the various methods of preservation of meat and the conditions to which the meat and meat products are

subject due to the different infections and contaminations. The application of the Regulations of the Department of Agriculture in connection with the judgment of carcasses, meats and meat-food products.

Practical demonstrations in meat inspection and judgment will be given at the local abattoirs.

Post-mortem examinations and demonstrations of morbid anatomy will be given, as opportunities arise, in the various hospital and ambulatory clinics in and about Washington, D. C. Special consideration will be given to discussion of gross pathological changes, procedure of technic, preparation of pathological specimens for museum purposes and methods of securing and forwarding material for diagnosis. Students will be required to write complete protocols of each case.

*Text-book.*—Mohler and Eichhorn's translation of Edelman's Meat Hygiene, second revised edition.

### ZOOLOGY AND PARASITOLOGY

MAURICE C. HALL, A.B., A.M.....Assistant Professor

*Zoology.*—In this course a brief survey of the general principles of zoology is undertaken. The history of zoology, the classification of the animal kingdom, the structure of typical forms in the different Phyla and the distribution of animals on the face of the earth will be considered. The course is designed to familiarize the student with the main facts and theories of zoology.

*Parasitology.*—This course is designed to give the student a practical knowledge of animal parasites. The nature of parasitism, the classification of parasites and the structure and life histories of those parasites of importance from the standpoint of meat inspection and veterinary practice are considered. By the use of fresh and preserved materials the student is given a first-hand knowledge of the more important parasites. Due consideration is given to the diseases caused by animal parasites, their prophylaxis, treatment and eradication.

### VETERINARY OBSTETRICS

CHAUNCEY M. GRUBB, D.V.M.....Instructor

The course of instruction will consist of lectures on obstetrical anatomy, foetal development, presentations and the diseases incidental to the periods of gestation and parturition.

The lectures will be illustrated by diagrams, models, natural preparations, and other appliances for demonstrating the principles taught.

*Text-book.*—Fleming, Dalrymple, Williams.

### SHOEING AND BALANCING

FRANK ALMON HUGINS, D.V.M.....Instructor



The course is intended to familiarize students with the principles of shoeing, the examination of the feet and proper use of special shoes for relief of defects or disease.

*Text-book.*—Lungwitz on Horseshoeing, Adams' translation.

#### DENTISTRY

CHAUNCEY M. GRUBB, D.V.M.....Instructor

The course in dentistry includes lectures on the development of the teeth of the domesticated animals, the determination of age, irregularities of the teeth, oral surgery and dental clinics.

*Text-book.*—Merillats' Animal Dentistry and Diseases of the Mouth.

#### BOTANY

HARRY H. FETTER, Ph.G.....Instructor

The course in botany embraces the general relation of plants, vegetative organs, their functions, reproductive organs and nutrition.

Ecological factors, diversity of plant life, evolution of sex, differentiation of tissues, and plant physiology will be fully considered.

#### PHARMACY

HARRY H. FETTER, Ph.G.....Instructor

Pharmacy includes the history and nomenclature of the U. S. Pharmacopoeia, metrology, metric system and common system of weights and measures. Principles employed in making various preparations, classification of official preparations, incompatibility.

Supplemented by laboratory work in which students are required to compound formulae of ointments, lotions, draughts and various preparations, official and extemporaneous.

#### MILITARY PRACTICE

J. R. HAYNES, D.V.M.,

Clinical Instructor in Veterinary Military Practice

This course consists of lectures and demonstrations of purely military veterinary subjects, and is given at Fort Myer, Va., the cavalry and artillery post near Washington, D. C.

The subjects of saddling, biting and draft, together with the study of the proper conformation of animals used for military purposes, are included in this set of lectures.

The control of epizootics in military life is also given special consideration.

#### VETERINARY JURISPRUDENCE

WILLIAM W. BRIDE, A.M., LL.B.....Lecturer

A series of lectures upon the Law of Animals, including suggestions relating to the conduct of veterinarians as experts in the trial of cases involving the above law.

#### SPECIAL LECTURES

In addition to the foregoing courses of lectures, a number of government experts have been engaged to give lectures on subjects of special interest to the veterinarian.

These men are specialists in their lines of scientific research, and this is the only school giving such a course.

#### EXAMINATIONS AND DEGREE

Examinations are held at the end of the course in each subject. Students failing in examinations will be permitted to be re-examined at the next regular examination period. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Dean. In order to avail themselves of the privilege of re-examination, students must file their written applications with the Dean not later than fifteen days before the date set for the examinations.

Proficiency is marked upon a scale of 100. A grade of 70 is required to pass an examination. Students who fail to appear at the regular examination period will be charged a fee of \$3 for a special examination in each subject.

If a satisfactory examination is passed, the student receives the Degree of Doctor of Veterinary Medicine (D.V.M.)

#### PRIZES

1. Gold medal for student attaining highest average for whole course.
2. Prize for best work in operative surgery for senior student.
3. Prize for best anatomical specimen prepared by a Sophomore student.
4. Prize for best anatomical specimen prepared by a Freshman student.

In addition to the foregoing, students attaining a general average of 90 per cent or over for the entire course will be graduated "With Distinction," the same to be inscribed upon their diploma.

#### THE VETERINARY LIBRARY

This library is located in the Administration Building of the College of Veterinary Medicine, and is open from 8 a.m. to 10 p.m.

It contains, in addition to volumes on veterinary medical subjects, the current veterinary journals.

Provision is made in the annual library fee charged every student to add to it as published, the important new works on veterinary medicine.

## OTHER LIBRARIES

Washington contains the Library of the Surgeon-General's Office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the government, is open to the public between the hours of 9 a.m. and 4.30 p.m. There is also the Library of Congress and the many excellent libraries of the various other government offices, in addition to the University Medical Library.

## FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable only on first entry into the University) .....	\$5
2. Library fee per annum.....	2
3. Tuition fee per annum.....	100
4. Fee for graduation.....	10

A deposit of \$5 per annum is required of every student to cover loss, breakage or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter-session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar, and will be received only at the end of a quarter-session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use.....	\$5
Microscope for Bacteriological, Pathological and Clinical	
Microscopy Laboratory use.....	6

## PAYMENT OF FEES

All fees are to be paid to the clerk. Tuition fees are payable quarterly, in advance. Matriculation, library and laboratory fees are payable in full, in advance.

## STUDENT EMPLOYMENT

The College of Veterinary Medicine will aid students, especially those coming from a distance, to obtain suitable employment as a means of defraying a part or all of their expenses while in pursuit of their college course. Opportunities for such employment in Washington are exceptionally good. The many Departments of Government, the Library of Congress, Congressmen's secretaryships, law offices, contractors' and

architects' offices, journalism, stenography, etc., offer a large number of positions of the most diverse kinds. While the College must not be understood as in any sense engaging to find employment for prospective students, in a great many cases important assistance can be rendered duly qualified applicants, if the fact of their desire to obtain employment is known. Applicants are particularly cautioned against coming to the University, intending to depend upon outside employment for support without being provided with funds sufficient to meet the expenses of at least the first half-year. Communications should be addressed to

THE DEAN,  
*College of Veterinary Medicine,  
The George Washington University,  
2113-2115 Fourteenth St. N.W., Washington, D.C.*

#### BOARD AND ROOMS

A register of approved boarding-houses is kept by the clerk. Accommodations cost from \$25 to \$40 a month.

For further information apply to David E. Buckingham, Dean, The George Washington University, College of Veterinary Medicine, Nos. 2113-2115 Fourteenth Street N. W., Washington, D. C.



## PART IV

STUDENTS IN THE UNIVERSITY  
DEGREES CONFERRED, MISCELLANEA



# STUDENTS REGISTERED IN THE UNIVERSITY 1913-1914

(Names of students who have withdrawn or graduated are indicated by stars; those who have entered since February 1, 1914, by daggers.)

## DEPARTMENT OF ARTS AND SCIENCES

### SCHOOL OF GRADUATE STUDIES

#### IN ATTENDANCE

- Bearce, Ira Mellen; Maine .....Business High School  
S.B., 1904, University of Maine. *Topic*—Chemistry.
- Boyle, William; Massachusetts.....1369 East Capitol Street  
S.B., 1909, Maryland Agricultural College. *Topic*—Chemistry.
- \*Coopersmith, Samuel; Nebraska.....1501 11th Street  
A.B., 1910, University of North Carolina; A.M., 1912, University  
of Nebraska. *Topics*—Chemistry, Biochemistry.
- †Reiskin, David; Russia.....2010 17th Street  
C.M.Eng., 1913, École de Mines et Faculté Polytechnique des  
Hainault a Mons. *Topic*—Chemistry.
- Starbecker, Moses; New York.....1104 5th Street  
S.B., 1910, College of the City of New York. *Topic*—Chemistry.
- Wagner, Elsie Marian; New York.....1007 13th Street  
Ph.B., 1906, Syracuse University. *Topic*—Bacteriology.

#### DOCTOR OF CIVIL LAW

- Miller, Clarence Alphonso; Mexico, American Consulate, Tampico, Mexico  
LL.B., 1899, Kansas City School of Law; LL. M., 1905, M. Dip.  
1906, George Washington University. State Department.

#### CIVIL ENGINEER

- Ball, William Curtis Cooley; Maryland,  
328 East 58th Street, New York City  
B.S. in C.E., 1912, George Washington University.
- Dutton, Donald Langley; District of Columbia...1721 Kilbourne Place  
B.S. in C.E., 1913, George Washington University.
- Dwyer, John Rochford; District of Columbia.....628 F Street S.W.  
B.S. in C.E., 1913, George Washington University.
- \*Hodgkins, Howard Wilkinson; District of Columbia....The Octavia  
B.S. in C.E., 1913, George Washington University.
- Kirk, Theodore Thomas; Kentucky.....2152 F Street  
B.S. in C.E., 1913, George Washington University.
- Slarrow, Malcolm Gordon; District of Columbia.....1308 13th Street  
B.S. in C.E., 1913, George Washington University.

## ELECTRICAL ENGINEER

- McCalip, Curtis Edgar; Maryland, 806 E. Preston Street, Baltimore, Md.  
B.S. in E.E., 1912, George Washington University.
- Safford, Howard Palmer; District of Columbia.....1933 Park Road  
B.S. in E.E., 1912, George Washington University.

## MECHANICAL ENGINEER

- Snelling, Henry Horner; Virginia.....3522 10th Street  
S.B. in M.E., 1913, George Washington University.

## MASTER OF SCIENCE

- Bradley, Willis Winter, Jr.; Washington.....1807 California Street  
Graduate, 1906, United States Naval Academy. *Topics*—Major,  
Chemistry; Minors, Mathematics, Physics.
- \*Cleaves, Florena; Kansas.....The Victoria  
A.B., 1910, Southwestern College. *Topics*—Major, Zoology;  
Minors, Botany, Bacteriology.
- Craighead, Frank Cooper; Pennsylvania.....926 B Street S.W.  
*Topics*—Major, Zoology; Minors, Zoology, Chemistry.
- Crawford, James Chamberlain; Nebraska.....U.S. National Museum  
*Topics*—Major, Zoology; Minors, Zoology, Botany.
- Dennis, Showell Coulhouser; Maryland,  
316 N. Columbus Street, Alexandria, Va.  
S.B. in Chemistry, 1912, Maryland Agricultural College. *Topics*  
—Major, Bacteriology; Minors, Chemistry, Biochemistry.
- Dodge, Cleon Orestes, New Hampshire,  
Bureau of Chemistry, Department of Agriculture  
S.B., 1915, New Hampshire College. *Topics*—Major, Chemis-  
try; Minors, Bacteriology, Microscopy.
- \*Finkelstein, Reuben; District of Columbia.....1501 11th Street  
A.B. and Teacher's Diploma, 1911, George Washington Univer-  
sity. *Topics*—Major, Education; Minors, Physics, Economics.
- Gardiner, Robert Franklin; Rhode Island.....1223 Irving Street  
S.B., 1908, Rhode Island State College. *Topics*—Major, Chem-  
istry; Minors, Bacteriology, Geology.
- \*Ginsburg, Samuel; District of Columbia.....915 20th Street  
S.B., 1912, College of the City of New York. *Topics*—Major,  
Biochemistry; Minors, Chemistry, Bacteriology.
- Graham, James Jesse Thomas; Maryland.....Hyattsville, Md.  
S.B., 1906, Maryland Agricultural College. *Topics*—Major,  
Chemistry; Minors, Bacteriology, Chemistry.
- †Hasenfratz, William; New York.....1501 11th Street  
S.B., 1913, College of the City of New York. *Topics*—Major,  
Bacteriology; Minors, Chemistry, Biochemistry.
- \*Hustvedt, Olaf Mandt; Iowa.....Proving Ground, Indian Head, Md.  
Graduate, 1909, United States Naval Academy. *Topics*—Major,  
Chemistry; Minors, Mathematics, Physics.



- \*Kerner, Abram Nathaniel; New York.....915 20th Street  
S.B., 1912, College of the City of New York. *Topics*—Major,  
Biochemistry; Minors, Chemistry, Bacteriology.
- \*McLeran, John David; District of Columbia....Station H, Route 1  
A.B., 1896, The Iuka Normal Institute; A.M., 1903, Southern  
Normal University. *Topics*—Major, Chemistry; Minors, Eng-  
lish, History.
- Miller, Carl Frederick; New York.....1737 Oregon Avenue  
S.B., 1912, Syracuse University. *Topics*—Major, Chemistry;  
Minors, Bacteriology, Microscopy.
- Miller, Harry McClure; Kentucky.....1440 W Street  
*Topics*—Major, Chemistry; Minors, Bacteriology, Zoology.
- Moore, Milton Donaldson; South Carolina..Department of Agriculture  
A.B., 1913, George Washington University. *Topics*—Major,  
Zoology; Minors, Zoology, Botany.
- North, Dexter; District of Columbia.....2852 Ontario Road  
S.B., 1913, Hamilton College. *Topics*—Major, Chemistry; Mi-  
nors, Mechanical Engineering, Electrical Engineering.
- Oberholser, Harry Church; District of Columbia...1444 Fairmont Street  
*Topics*—Major, Zoology; Minors, Zoology, Botany.
- †Outwater, Kate Sorrell; Virginia.....620 F Street, S.W.  
A.B., 1913, George Washington University. *Topics*—Major,  
Zoology; Minors, German, Botany.
- \*Peck, Caro Beth; Illinois.....702 20th Street  
S.B., 1908, Northwestern University. *Topics*—Major, Physics;  
Minors, Chemistry, Physics.
- †Radcliffe, Lewis; New York.....301 Tennessee Avenue, N.E.  
A.B., 1905, Cornell University. *Topics*—Major, Zoology; Mi-  
nors, Zoology, Bacteriology.
- Roundy, Paul Vere; New York.....U. S. Geological Survey  
A.B., 1912, George Washington University. *Topics*—Major, Ge-  
ology; Minors, Mineralogy, Zoology.
- \*Sanford, Herbert Luther; New York.....Bureau of Entomology  
S.B., 1910, Cornell University. *Topics*—Major, Zoology; Mi-  
nors, Zoology, Microscopy.
- †Smith, Delos Hamilton; District of Columbia.....Southern Building  
B.S. in Arch., 1906, George Washington University. *Topics*—  
Major, History of Art; Minors, Architecture, Archaeology.
- \*Valaer, Peter, Jr.; North Carolina.....Bureau of Internal Revenue  
S.B., 1906, Agricultural and Mechanical College of North Caro-  
lina. *Topics*—Major, Chemistry; Minors, Bacteriology, Micro-  
scopy.
- \*Webster, Hugh; District of Columbia.....Y. M. C. A.  
S.B. in Agriculture, 1912, Iowa State University. *Topics*—  
Major, Chemistry; Minors, Biochemistry, Bacteriology.

## MASTER OF ARTS

- Ashley, Rebecca Sherman; Minnesota.....1100 M Street  
*Topics*—Major, Archaeology; Minors, Archaeology, English.
- Brigham, Gertrude Richardson; Massachusetts..Smithsonian Institution  
 A.B., 1913, George Washington University. *Topics*—Major,  
 English, Minors; History, French.
- Burden, Katherine; District of Columbia.....1237 Crittenden Street  
*Topics*—Major, English; Minors, Zoology, German.
- Carter, Francis Edward; Virginia. Episcopal High School, Alexandria, Va.  
 A.B., 1913, George Washington University. *Topics*—Major, His-  
 tory; Minors, History, Political Science.
- Clark, Edith Mary; New York.....Gunston Hall  
 L.L.A., 1899, St. Andrews University, Scotland. *Topics*—Major,  
 Archaeology; Minors, Archaeology, English.
- †Corson, Florence Virginia Morrison; Maryland.....2129 F Street  
 A.B. and Diploma of Education, 1914, George Washington Uni-  
 versity. *Topics*—Major, English; Minors, English, Education.
- Covell, David Ransom Covell; District of Columbia....3221 11th Street  
 A.B., 1910, George Washington University. *Topics*—Major, So-  
 ciology; Minors, Philosophy, Greek.
- Garber, John Absalom; District of Columbia.....508 B Street, S. E.  
 A.B., 1891, Bridgewater College. *Topics*—Major, Education;  
 Minors, Psychology, Philosophy.
- Heller, Mary Elizabeth; Maryland.....3427 Holmead Place  
 S.B., 1908, Columbia University. *Topics*—Major, German; Mi-  
 nors, Romance Languages, Sociology.
- \*Huff, Daisie Ione. Illinois.....2152 F Street  
 A.B., 1913, George Washington University. *Topics*—Major Ed-  
 ucation; Minors, Psychology, Philosophy.
- \*Judd, Edwin Edgar; District of Columbia.....15 Todd Place, N.E.  
 A.B., 1913, George Washington University. *Topics*—Major,  
 Economics; Minors, Political Science, Sociology.
- †Knudtson, Clarence Arthur, District of Columbia.653 Morton Place, N.E.  
 A.B., 1913, George Washington University. *Topics*—Major,  
 English; Minors, Philosophy, Sociology.
- Mallory, William Johnston; District of Columbia, 1720 Connecticut Ave.  
 M.D., 1903, George Washington University. *Topics*—Major,  
 Physiology and Pharmacology; Minors, Pathology, Chemistry.
- Marshall, William Clarkson, Jr.; Virginia...Theological Seminary, Va.  
 A.B., 1907, University of Virginia. *Topics*—Major, Philosophy;  
 Minors, English, Zoology.
- Ossire, Cora Amelia; District of Columbia.....2729 Ontario Road  
 A.B., 1913, George Washington University. *Topics*—Major, Ed-  
 ucation; Minors, English, French.

- Penagos y R. Arcesio**; Columbia.....1337 L Street  
Ph.B., 1906; LL.D., 1910, Cauca University, Columbia. *Topics*  
Major, Political Science; Minors, Economics, International Law  
and Diplomacy.
- Roper, Margaret May**; District of Columbia,  
816 Massachusetts Ave., N.E.  
A.B., 1912, Randolph Macon College. *Topics*—Major, English;  
Minors, Sociology, Economics.
- Schwartz, Claus Johann**; Germany.....3526 11th Street  
A.B., 1908, George Washington University. *Topics*—Major,  
German; Minors; French, Education.
- Scott, Mabel Lavinia**; District of Columbia.....1455 Girard Street  
A.B., 1907, George Washington University. *Topics*—Major,  
English; Minors, German, History.
- Shen, Tsou-Chen**; China.....2006 Columbia Road  
A.B., 1909, St. John's College, Shanghai. *Topics*—Major, Inter-  
national Law and Diplomacy; Minors' Political Science, Soci-  
ology.
- Stout, Joseph Duerson**; District of Columbia.....233 8th Street, N.E.  
A.B., 1910; M.D., 1913, George Washington University. *Topics*  
Major, Physiology and Pharmacology; Minors, Physiology and  
Pharmacology, Pathology.
- Underwood, Harriet**; District of Columbia.....2551 37th Street  
A.B., 1913, George Washington University. *Topics*—Major,  
Education; Minors, History, English.
- von Zielinski, Carl Maria Johann**; Germany.....1706 F Street  
A.B., 1913, George Washington University. *Topics*—Major, Eco-  
nomics; Minors, History, International Law and Diplomacy.
- White, Mary Josephine**; New York..42 Riverside Drive, New York City  
A.B., 1913, George Washington University. *Topics*—Major,  
English; Minors, German, History.

## DOCTOR OF PHILOSOPHY

- Alden, Levi Russell**; District of Columbia.....Union Trust Bldg.  
A.B., 1903, A.M., 1904, LL.B., 1906, George Washington Univer-  
sity. *Topics*—Major, History; Minors, Law, History.
- Bevard, Katherine Harper**, Pennsylvania.....1423 R Street  
A.B., 1911, A.M., 1913, George Washington University. *Topics*  
—Major, Education; Minors, Education, English.
- Bookstaber, Philip David**; New York.....12 Grant Place  
S.B., 1911, College of the City of New York; A.M., 1912, Colum-  
bia University. *Topics*—Major, Economics; Minors, Sociology,  
Political Science.
- †**Bowers, Andrew Jackson, Jr.**; South Carolina.....1716 G Street  
A.B., 1908; A.M., 1913, Newberry College. *Topics*—Major, Po-  
litical Science; Minors' International Law and Diplomacy,  
History.



- Catella, Samuel Spinoza; Holland.....628 East Capitol Street  
*Topics*—Major, Political Science; Minors, Economics, Education.
- Churchill, George Morton; Massachusetts.....The Newton, 520 E Street  
 A.B., 1896, Boston University; A.M., 1909, George Washington  
 University. *Topics*—Major, History; Minors, Economics, His-  
 tory.
- Custis, Horace Hatch; District of Columbia.....The Iroquois  
 A.B., 1906, Johns Hopkins University; A.M., 1908, George Wash-  
 ington University. *Topics*—Major, Chemistry; Minors, Chem-  
 istry, Bacteriology.
- Doyle, Aida Mary; Pennsylvania.....1359 Park Road  
 S.B., 1898, S.M., 1899, George Washington University. *Topics*—  
 Major, Chemistry; Minors, Chemistry, Microscopy.
- Ewing, Clare Olin; Ohio.....1736 G Street  
 S.B., 1912, S.M., 1913, Ohio State University. *Topics*—Major,  
 Chemistry; Minors, Bacteriology, Biochemistry.
- \*Finkelstein, Reuben; New York.....1501 11th Street  
 A.B., 1911, George Washington University. *Topics*—Major, Ed-  
 ucation, Minors, Economics, Mathematics.
- Hall, Maurice Crowther; District of Columbia,  
 1815 Hamlin Street, N. E.  
 S.B., 1905, Colorado College; A. M., 1906, University of Nebras-  
 ka. *Topics*—Major, Zoology; Minors, Zoology, Pathology.
- \*Hood, Joseph Douglas; Illinois.....2009 Kalorama Road  
 A.B., 1910, University of Illinois. *Topics*—Major, Zoology;  
 Minors, Zoology, Botany.
- Huddle, John Thomas, District of Columbia.....738 11th Street  
 A.B., 1891; A.M., 1896, Roanoke College. *Topics*—Major, Eng-  
 lish; Minors, Psychology, Philosophy.
- Ice, Harry Lawrence; Maryland.....Mt. Rainier, Md.  
 A.B., 1912; A.M., 1912, Bethany College. *Topics*—Major, Phi-  
 losophy; Minors, English, Sociology.
- \*Jackson, Hartley Harrad Thompson; District of Columbia,  
 1326 Euclid Street  
 A.B., 1904, Milton College; A.M., 1909, University of Wisconsin.  
*Topics*—Major, Zoology; Minors, Zoology, Psychology.
- \*Kibler, Thomas Latimer; District of Columbia.....1715 35th Street  
 A.B., 1904, Randolph Macon College; A.M., 1908, George Wash-  
 ington University. *Topics*—Major, Economics; Minors, His-  
 tory, Sociology.
- †Lowe, Edith Blinston; District of Columbia.....2622 Woodley Place  
 A.B., 1911; A.M., 1912, George Washington University. *Topics*  
 —Major, English; Minors, English, History.
- Morse, Elisha Wilson; District of Columbia.....1723 Willard Street  
 B.A.S., 1897, Harvard University. *Topics*—Major, Zoology;  
 Minors, History, Economics.



- Palkin, Samuel; District of Columbia .....1215 I Street  
Ph.B., 1910, Yale University; S.M., 1913, George Washington  
University. *Topics*—Major, Chemistry; Minors, Bacteriology,  
Microscopy.
- Pierce, Ulysses Grant Baker; District of Columbia....1616 Riggs Place  
B.D., 1890, Hillsdale College; A.B., 1909; D.D., 1909, George  
Washington University. *Topics*—Major, Philosophy; Minors,  
Aesthetics, English.
- Roark, Ruric Creegan; Kentucky.....1668 Park Road  
A.B., 1907, University of Cincinnati; A.M., 1908, University of  
Illinois. *Topics*—Major, Chemistry; Minors, Bacteriology,  
Pharmacology.
- Schwartz, Claus Johann; Germany.....3526 11th Street  
A.B., 1908, George Washington University. *Topics*—Major,  
German; Minors, French, Education.
- \*Sniffin, William Webb; District of Columbia.....2625 Garfield Street  
A.B., 1906; A.M., 1907, George Washington University. *Topics*  
—Major, French; Minors, Spanish, Philosophy.
- Stout, Joseph Duerson; District of Columbia.....233 8th Street, N.E.  
A.B., 1910; M.D., 1913, George Washington University. *Topics*  
—Major, Physiology and Pharmacology; Minors, Physiology  
and Pharmacology, Pathology.
- Swett, Otis Dow; Maryland.....1325 H Street  
LL.B., 1891; LL.M., 1892; S.B., 1904; S.M., 1909, George Wash-  
ington University. *Topics*—Major, Chemistry; Minors, Chem-  
istry, Bacteriology.
- Ulke, Titus; District of Columbia.....U. S. Patent Office  
Met. E., 1889, Royal Academy of Mines; LL.B., 1909; S.B., 1909;  
M.P.L., 1909, George Washington University. *Topics*—Major,  
Zoology; Minors, Zoology, Botany.
- Wentz, Abdel Ross; Pennsylvania.....809 L Street  
A.B., 1904; A.M., 1907, Pennsylvania State College; B.D., 1907,  
Gettysburg Theological Seminary. *Topics*—Major, History;  
Minors, History, German.

## THE COLLEGES

The following list includes all undergraduate students. The registration is indicated by the abbreviations: C. C., Columbian College; Eng., for College of Engineering and Mechanic Arts; T. C., for Teachers College. The letters c., e., m., and a., after the abbreviation Eng., indicate that the student is a candidate for the bachelor's degree in Civil, Electrical or Mechanical Engineering, or in Architecture; the absence of these letters indicates a special student.

Abbott, Ruth Estelle, T. C.; District of Columbia...1308 Spring Road  
Abercrombie, Clare, C. C.; Alabama.....Falkstone Courts

- Abramson, Nathan, Eng., c; District of Columbia...100 N. J. Ave. N.W.  
 \*Adams, Albert Chester, C. C.; Maryland.....College Park, Md.  
 Agnew, Ethna, C. C.; District of Columbia, Apt. 43, The Lambert  
 Aitcheson, Mary Caroline, C. C.; Virginia,  
     311 S. Lee Street, Alexandria, Va.  
 \*Akers, Edwin, Eng.; District of Columbia...1016 Massachusetts Avenue  
 Albert, Francis Lee, C. C.; Iowa.....Y. M. C. A.  
 Albes, Julia Fredericka, C. C.; Alabama.....1737 Corcoran Street  
 Aldridge, Isabel Miller, T. C.; New York.....819 Allison Street  
 Allwine, Elsie May, T. C.; District of Columbia,  
     513 12th Street, N. E.  
 Almon, Harry Foster, Eng.; Montana.....719 11th Street, N.W.  
 Anders, Walter Lesisne, C. C.; Texas.....708 19th Street  
 Anderson, James Francis, Eng.; New York.....402 M Street N.W.  
 \*Anderson, Marion T., C. C.; District of Columbia,  
     1360 Fairmont Street  
 Appleby, Wilmer Conrad, C. C.; Indiana.....676 4th Street N.E.  
 Arledge, Caroline Mascott, C. C.; District of Columbia,  
     2628 Garfield Street, N.W.  
 Arnold, Virginia Josephine, T. C.; District of Columbia,  
     1824 Monroe Street  
 \*Austin, Fred, C. C.; District of Columbia...731 Rock Creek Ch. Rd.  
 Ayler, Ruth Leah, C. C.; District of Columbia...244 8th Street, N.E.  
 Bader, Joseph P., C. C.; New York.....1501 11th Street, N.W.  
 Bailey, Bertrand W., C. C.; Massachusetts.....2138 G Street, N.W.  
 \*Baker, Maude, C. C.; New York.....1217 East Capitol Street  
 Baker, William E., C. C.; District of Columbia.....433 Y. M. C. A.  
 Ball, Homer W., Eng.; District of Columbia.....Cherrydale, Va.  
 Ballard, Emory Lester, C. C.; District of Columbia...107 Bates Street  
 Balls, Arnold Kent, C. C.; Pennsylvania.....1736 G Street N.W.  
     B.S. in Chem., University of Pennsylvania, 1912.  
 Barber, Chas. W., Eng., c; District of Columbia...3428 Brown Street  
 Barnes, Marjorie, C. C.; Maryland.....143 11th Street N.E.  
 Barr, Eugene Osmon, C. C.; District of Columbia...105 5th Street N.E.  
 Barse, George Percy, C. C.; Maryland.....1363 B Street S.E.  
 Bashford, Margaret Josepha, T. C.; Virginia,  
     R.F.D. No. 2, Alexandria, Va.  
 Baston, George Henry, C. C.; Maine .....Y. M. C. A.  
 \*Bates, Lloyd Graham, Eng., e; Pennsylvania.....1741 G Street  
 Batt, Joseph Harper, C. C.; Delaware .....1717 S Street N.W.  
 Baughman, Walter, F., C. C.; Pennsylvania .....1736 G Street  
     B.S. in Chem., University of Pennsylvania, 1912.  
 Bayly, Margaret, T. C.; District of Columbia...1333 11th Street N.W.  
 \*Beacom, Harold F., C. C.; Iowa.....1914 16th Street  
 Beckett, Leighton D., C. C.; Iowa.....The St. Regis  
 Bell, Grace E., C. C.; District of Columbia .....2548 17th Street

- Bell, Margaret Wilson, C. C.; District of Columbia.....2548 17th Street  
 Beller, Frederick Franklin, C. C.; District of Columbia,  
     235 1st Street N.E.  
 Beller, Elizabeth Caroline, T. C.; District of Columbia,  
     235 1st Street N.E.  
 Beller, Sadie White, T. C.; District of Columbia....235 1st Street N.E.  
 Beneman, Harry G., C. C.; Maryland.....904 Westminster Street  
 Bennett, Harry, Eng.; Pennsylvania .....610 5th Street N.E.  
 \*Bennett, J. Marsden, C. C.; District of Columbia,  
     741 Varum Street N.W.  
 Benton, Ralph Webster, C. C.; District of Columbia.....462 O Street  
 Berman, Morris I., C. C.; Minnesota.....415 M Street N.W.  
 Best, Joanna Elizabeth, C. C.; District of Columbia,  
     1133 Euclid Street N.W.  
 Bixler, John Shively, C. C.; District of Columbia,  
     821 Massachusetts Ave. N.E.  
 Blanchard, Mabel Elizabeth, C. C.; District of Columbia,  
     806 Massachusetts Ave. N.E.  
 Boesch, Harry Luther, Eng.; District of Columbia..616 E Street N.E.  
 Bontz, Mary Ellen, T. C.; Virginia,  
     422 N. Alfred Street, Alexandria, Va.  
 Boone, Pearl Lee, C. C.; Maryland.....Hyattsville, Md.  
 \*Bopp, William Elmer, Eng., c.; District of Columbia.1509 E. Street S.E.  
 Boteler, May H., C. C.; District of Columbia,  
     Michigan Avenue, Brookland, D. C.  
 Bothwell, Harry Briggs, Eng.; Pennsylvania.....110 F Street S.E.  
 Bowen, Seth Thomas, Eng., c.; Ohio.....1736 G Street  
 \*Bowers, A. J., Jr., C. C.; District of Columbia.....1716 G Street  
     A.B., 1908; A.M., 1913, Newberry College.  
 \*Boyle, Albert H., C. C.; Montana.....1602 U Street N.W.  
 Boyle, John, Jr., C. C.; District of Columbia...1369 East Capitol Street  
     B.S., Massachusetts Institute of Technology.  
 Brackett, James H., C. C.; District of Columbia..1464 Girard Street  
 Braddock, Roberta Iola, C. C.; District of Columbia..2620 13th Street  
 Bradley, Everett Lamont, C. C.; District of Columbia..40 S Street N.W.  
 Bradley, Maurice Byron, Eng., m.; District of Columbia,  
     40 S Street N.W.  
 \*Brady, J. Camden, Eng.; West Virginia.....1826 California Street  
 Brailowsky, Julius, Eng., e.; District of Columbia..1457 Corcoran Street  
 Brand, Albert Arnold, Eng. e.; Indiana.....621 19th Street  
 Brattain, Paul Henry, C. C.; Indiana.....420 10th Street N.E.  
 Breneman, Claude R., C. C.; District of Columbia,  
     935 New York Avenue  
 Brewer, Elin Gilmore, C. C.; District of Columbia,  
     608 Massachusetts Avenue N.W.  
 Brez, Yetta, C. C.; District of Columbia.....908 New York Avenue



- Brockwell, John Francisco, C. C.; North Carolina,  
1259 Morse Street N.E.
- Brookes, William B. N., Eng., m.; District of Columbia,  
1525 Corcoran Street
- Broomell, Arthur W., C. C.; Pennsylvania.....Y. M. C. A.  
A.B., 1906, Swarthmore College.
- Brown, Alvin McCreary, C. C.; Maryland.....Berwyn, Md.
- Brown, Ammi, C. C.; Colorado.....928 New York Avenue
- \*Brown, Clara Gilpin Chappell, T. C.; District of Columbia,  
3901 Grant Road
- Brown, Ethel, T. C.; District of Columbia.....Kenilworth, D. C.
- Brown, Mary, T. C.; District of Columbia.....2464 Ontario Road
- Brown, Norman Cuthbert, C. C.; District of Columbia.....42 S Street
- Brown, Wager Swayne, Eng.; District of Columbia,  
1475 Columbia Road
- \*Brown, Wilmarth, Eng.; District of Columbia,  
3145 Mt. Pleasant Street
- Browne, Ethel, T. C.; District of Columbia.....Kenilworth, D. C.
- Browne, Gertrude Veronica, T. C.; District of Columbia,  
1344 Girard Street
- Browne, Margaret Marian, C. C.; District of Columbia,  
1344 Girard Street N.W.
- Browning, Martha Ringgold, C. C.; District of Columbia,  
707 East Capitol Street
- Brunner, Frederick J., C. C.; District of Columbia,  
1226 Lawrence Street N.E.
- \*Bryson, Laura Elizabeth, T. C.; District of Columbia,  
714 12th Street N.E.
- Buchanan, James Allison, Eng., e.; District of Columbia...901 M Street
- Bullough, Joseph Harold, Eng., m.; District of Columbia,  
122 Tennessee Ave.
- Burch, James W., Eng.; District of Columbia.....1735 Willard Street
- Burden, Katherine, C. C.; District of Columbia...1237 Crittenden Street
- Burgess, James Irving, Eng.; District of Columbia..403 11th Street S.E.
- Burke, Ellen Teresa, C. C.; District of Columbia,  
531 Jefferson Street, Brightwood Park, D. C.
- Burleson, Adele Sidney, C. C.; Texas.....1901 F Street
- Burleson, Lucy Hyle, C. C.; Texas.....1901 F Street
- \*Burleson, Jennie May, C. C.; District of Columbia...Fort Myer, Va.
- Burt, Edwin Caleb, C. C.; District of Columbia..1102 Vermont Avenue
- \*Burton, Lawrence Elmer, Eng., e.; Indiana.....1221 O Street
- Byrne, Joanna Kenealy, (Mrs.), C. C.; District of Columbia,  
3511 Center Street N.W.
- Caemmerer, Johannes Paul, C. C.; Wisconsin.....925 L Street
- \*Caffrey Charles Rogers, Eng.; District of Columbia,  
5801 Colorado Avenue, Brightwood, D. C.



- Callihan, Loyzelle J., C. C.; Arkansas,  
118 Willow Avenue, Takoma Park, D. C.
- Calloway, Grade, C. C.; Texas.....206 Maryland Avenue N.E.
- Cam, Helen Elizabeth, T. C.; District of Columbia...58 T Street N.W.
- \*Camp, Guy W. A., C. C.; Maryland.....1226 H Street N.W.
- Campbell, Arthur B., Eng., e.; District of Columbia,  
24 Rhode Island Avenue N.E.
- \*Campbell, Max D., Eng., e.; Maryland.....1446 Irving Street
- Campfield, Allan Bailey, Eng., m.; District of Columbia,  
Clark Place, Conduit Road
- Capell, Isabel Rhoda, T. C.; District of Columbia...471 H Street N.W.
- A.B., 1907, George Washington University.
- Capper, Harry Walter, Eng., e.; Virginia.....219 8th Street S.E.
- Carden, Sam Poe, C. C.; Texas.....1229 O Street N.W.
- Carlson, Vivian, C. C.; New York.....1134 12th Street N.W.
- Carpenter, Clarence Forrest, Eng., a.; Indiana ..Room 601, Y. M. C. A.
- \*Carpenter, Essex P., C. C.; District of Columbia...1921 G Street N.W.
- Carpenter, Lillian Evans, T. C.; District of Columbia,  
205 D Street N.E.
- Carr, Kate Edna, T. C.; District of Columbia,  
1833 North Capitol Street
- Catheart, Paul Hamilton, C. C.; Virginia.....Ballston, Va.
- \*Chalmers, Niles, C. C.; Texas.....620 5th Street
- †Chamberlain, Ernest Rogers, C. C.; Kansas.....2004 F Street
- Chapin, Olive R., T. C.; Illinois.....1441 Clifton Street
- Chapman, Thomas Hutchinson, C. C.; District of Columbia,  
129 F Street N.W.
- Chaves, Katherine Isabel, C. C.; New Mexico.....1435 Clifton Street
- Cheney, Edith, C. C.; District of Columbia.....816 Taylor Street
- Cheney, Frank Shaw, Eng., e.; District of Columbia,..816 Taylor Street
- Cherry, Helen Elizabeth, C. C.; District of Columbia,  
936 O Street N.W.
- Cherry, Paul Norman, C. C.; District of Columbia,  
1363 Maryland Avenue N.E.
- \*Chesborough, Mary Denison, T. C.; Wisconsin.....Forest Glen, Md.
- Clark, Clyde F., C. C.; Iowa.....The Leumass, 12 and Q Streets
- Cleaves, Florena, C. C.; Kansas .....The Victoria
- \*Close, Loraine, C. C.; Ohio.....2030 G Street
- Clements, Mildred Margaretta, T. C.; District of Columbia,  
813 East Capitol Street
- Cochrane, John Edward Walker, Eng., c.; District of Columbia,  
1414 K Street
- Coe, Mayne R., C. C.; District of Columbia...2947 Mills Avenue N.E.
- †Conboe, William T. Eng., a; California.....311 M Street
- \*Connor, Daniel Allman, C. C.; District of Columbia,  
130 D Street S.E.

- Connor, Mary, C. C.; District of Columbia.....130 D Street S.E.  
Cook, Marie Albertina, C. C.; District of Columbia...930 P Street N.W.  
Copeland, Leland Standford, C. C.; Missouri.....1114 Euclid Street  
Corbett, Katherine C., C. C.; District of Columbia,  
1411 Harvard Street N.W.  
Cornell, Herbert Watson, C. C.; Colorado.....1738 F Street  
\*Cornwell, Annie B., C. C.; District of Columbia,  
711 Massachusetts Avenue N.E.  
Coronado, Henry, C. C.; Columbia.....3411 14th Street  
Corson, Edna Lois, C. C.; Maryland.....1154 17th Street  
\*Corson, Florence V. M., T. C.; Maryland.....Silver Spring, Md.  
Cost, Roscoe Wyand, Eng.; District of Columbia.....916 15th Street  
\*Craighill, Susan Robins, T. C.; District of Columbia,  
3062 Q Street N.W.  
\*Crain, Newell B., C. C.; Texas.....326 D Street N.E.  
Craton, Anna Washington, C. C.; North Carolina...1410 Girard Street  
Craton, Richard Washington, Jr., Eng.; North Carolina,  
1410 Girard Street  
\*Crook, William Carlyle, C. C.; Maryland.....Laurel, Md.  
Crown, James Edmund, Eng., m.; District of Columbia,  
727 5th Street N.E.  
Cruikshanks, Benjamin C., Eng., m.; District of Columbia,  
Douglas and 24th Streets  
\*Cubberly, Warner I., Eng.; District of Columbia...911 M Street N.W.  
\*Cullum, Clarence S., C. C.; District of Columbia...109 Bates Street N.W.  
Cummiford, Asa Norman, Eng.; Michigan.....1223 D Street S.E.  
Cunningham, Julian Wallace, C. C.; District of Columbia,  
1636 Monroe Street  
†Cushman, Rebecca, C. C.; District of Columbia,  
1445 Massachusetts Avenue  
Daggett, Edith Gertrude, T. C.; District of Columbia...16 Iowa Circle  
Daidy, George Augustine, Eng., a.; District of Columbia,  
1316 L Street N.W.  
Dans, Jose P., Eng., c.; Philippine Islands.....2025 G Street  
Dashiell, Emily Rose, T. C.; Maryland.....Library of Congress  
Davis, Joe N., C. C.; Texas.....708 19th Street  
Davis, Lee Sherman, C. C.; New York.....Takoma Park Seminary  
Davison, Ruth Lowe, T. C.; District of Columbia...1334 Girard Street  
Degenhardt, George Albert, Eng., c.; District of Columbia,  
1007 24th Street  
Degnan, George A., Eng., m.; Pennsylvania.....450 M Street  
DeGrange, Mark, C. C.; District of Columbia.....25 U Street N.E.  
Delaney, James Leroy, Eng., m.; District of Columbia,  
600 Park Road N.W.  
\*Dellwig, Flora Marie, C. C.; District of Columbia,  
175 Massachusetts Avenue, N.E.

- DeLong, Forrest Allen, Eng.; District of Columbia,  
607 8th Street N.E.
- Denison, Harriet Alberta, C. C.; District of Columbia,  
3117 35th Street, Cleveland Park
- Dent, Mary Catherine, T. C.; District of Columbia,  
3009 D Street N.W.
- Dessez, Charlotte Caroline, C. C.; District of Columbia,  
1370 Columbia Road
- DeVaughan, William Aloysius, Eng.; Virginia,  
315 S. Pitt Street, Alexandria, Va.
- Diaz, M. Humbert, C. C.; Florida.....care Kalston and Siddons
- Diesman, Justin P., C. C.; Kentucky.....1113 9th Street
- \*Disney, Edward Irvin, Eng.; District of Columbia,  
128 Tennessee Avenue N.E.
- Dixon, Willis, Eng.; Virginia.....U. S. S. Tallahassee
- Donnelly, Bernard Patrick, Eng.; District of Columbia,  
223 E Street S.E
- \*Doran, Helen, C. C.; District of Columbia.....2712 27th Street.
- \*Dorroh, J. O., T. C.; Alabama.....125 A Street N.E.
- Douglas, Elsie Young, C. C.; Florida.....The Sherman
- †Douglas, James Franklin, C. C.; District of Columbia,  
516 East Capitol Street
- Dowell, Edgar F., Eng.; Virginia.....Y. M. C. A.
- Doyle, Roscoe Clifford, Eng.; District of Columbia,  
517 6th Street N.W.
- Drake, Alice Hutchins, C. C.; District of Columbia,  
2611 Adams Mill Road
- Dulac, Victor, C. C.; District of Columbia,  
1414 Massachusetts Avenue N.W.
- Dulin, Cecilia Pinkney, T. C.; District of Columbia,  
3 Grafton Street, Chevy Chase, Md.
- \*Duvall, James, C. C.; District of Columbia....2513 Wisconsin Avenue
- †Duvall, Russell L., C. C.; District of Columbia....621 A Street N.E.
- Duvall, Walker M., Eng., e.; District of Columbia,  
1831 M Street N.W.
- Earll, Donald Montgomery, C. C.; Maryland.....2536 14th Street
- Eastman, Annie H., C. C.; District of Columbia.....1305 17th Street
- \*Eatherly, Walter S., Eng.; Tennessee.....1617 Swann Street
- A.B., 1912, George Washington University.
- Eddingfield, Ina Dean, T. C.; District of Columbia,  
1440 Harvard Street
- Edwards, John Davis, U.S.N., Eng.; Virginia.....2017 H Street N.W.
- Egbert, Freda Dorothy, T. C.; District of Columbia...1739 1st Street
- Ehrman, Herbert Allan, Eng., m.; Maryland....1328 Fairmont Street
- Eiker, Fillmore Wynkoop, Eng., c.; Maryland,  
6312 Connecticut Avenue, Chevy Chase, Md.

- Eiker, Mathilde, C. C.; District of Columbia.....1006 Otis Place  
 Eldridge, Hattie Dayton, T. C.; North Carolina.....2017 Park Road  
 Elgin, Hugh Bassett, C. C.; Kentucky.....916 15th Street  
 Eliason, Raymond Orlando, Eng.; District of Columbia,  
 214 4th Street S.E.  
 \*Elkins, Leonard B., C. C.; District of Columbia,  
 Mt. Vernon Apartment  
 †Ellenbogen, Lewis Katzen, T. C.; New York.....431 M Street  
 Elliott, Florian A., Eng.; Virginia.....1003 Woodward Bldg.  
 Ellis, Edna Virginia, T. C.; District of Columbia.....111 5th Street S.E.  
 Ellison, Minnie D., C. C.; Virginia.....West Falls Church, Va.  
 Elwood, William Adams, Eng., c.; New York.....627 7th Street N.E.  
 Emig, Evelyn Martha, C. C.; District of Columbia.....1765 P Street  
 Engel, Abraham, C. C.; New York.....511 K Street, N.E.  
 English, Maude Franzoni, T. C.; District of Columbia,  
 2014 15th Street  
 Enlows, Ella M. Austin, C. C.; District of Columbia,  
 1478 Columbia Road  
 Erikson, Bernhard Edwin, C. C.; Illinois.....706 20th Street  
 Espey, Emolyn Carpenter, T. C.; District of Columbia,  
 122 11th Street N.E.  
 †Ettenger, Edwin Lloyd, Eng.; District of Columbia,  
 1507 Lamont Street  
 Ettenger, Robert Lee, Jr., C. C.; District of Columbia,  
 1507 Lamont Street N.W.  
 \*Evans, Florence E., C. C.; Ohio.....807 G Street N.E.  
 Evans, Morgan William, C. C.; District of Columbia,  
 225 B Street N.E.  
 \*Evarts, Frances Louise, C. C.; District of Columbia,  
 1647 Lamont Street  
 \*Everett, John Redden, T. C.; Minnesota.....Y. M. C. A.  
 Ewing, Paul A., Eng.; District of Columbia.....1327 Clifton Street  
 A.B., 1907, University of Nebraska.  
 Farmer, Mary Caroline, C. C.; North Carolina,  
 651 Lexington Place N.E.  
 †Farnham, Arthur Blanchard, Eng.; District of Columbia,  
 1774 U Street N.W.  
 Farrell, Agnes M., C. C.; District of Columbia.....1424 Clifton Street  
 Farrell, Charlotte Claire, C. C.; District of Columbia,  
 1424 Clifton Street N.W.  
 \*Farrell, Helen Isabel, C. C.; District of Columbia..1424 Clifton Street  
 \*Faye, James Jacob, Eng., m.; District of Columbia,  
 54 Bryant Street N.W.  
 Fearing, Justin Lincoln, C. C.; Massachusetts....Bureau of Standards  
 \*Fehr, J. Ralph, Eng., e.; Illinois.....915 18th Street  
 LL.B., 1913, George Washington University.



- Ferguson, Elizabeth, T. C.; District of Columbia...1239 Kenyon Street  
 Ferguson, Marion Frances, C. C.; District of Columbia,  
 1239 Kenyon Street  
 Field, Luella, C. C.; District of Columbia.....1934 Calvert Street  
 Fink, Henri, C. C.; Virginia.....Stonleigh Court  
 \*Finley, David Edward, Jr., C. C.; South Carolina,  
 1219 Connecticut Avenue  
 \*Fischer, Melvin Ferdinand, Eng., e.; District of Columbia,  
 1006 Massachusetts Avenue N.E.  
 Fisher, Howard Cochran, C. C.; District of Columbia...3021 O Street  
 Fisher, Jessie Claire, T. C.; District of Columbia,  
 71 Randolph Place N.W.  
 \*Fisher, Letta B., C. C.; District of Columbia.....500 M Street N.W.  
 Fisher, Lewis Civile, C. C.; Maryland.....1769 Columbia Road  
 Flemer, Henry Lewis, Eng.; District of Columbia,  
 710 Maryland Avenue N.E.  
 \*Flora, Charles Wesley, C. C.; Kansas.....Y. M. C. A.  
 Fogerty, Gertrude Catherine, C. C.; District of Columbia,  
 1161 5th Street N.E.  
 Fogle, Fred M., C. C.; District of Columbia....1100 Vermont Avenue  
 Ford, Florence M., C. C.; Delaware.....615 22nd Street  
 Foster, Carrington, Eng.; District of Columbia. 303 The Rockingham  
 Foster, Ethel Elizabeth, T. C.; District of Columbia...19 Iowa Circle  
 Bachelor's Diploma, 1901, Columbia University (Teachers College).  
 Fowler, Maude E., C. C.; District of Columbia.....1510 30th Street  
 Fraser, William Wright, Eng., e.; Maryland.....1404 Perry Street  
 A.B., 1905, New Windsor College; L.B., 1911, George Wash-  
 ington University.  
 Freemire, Leroy H., Eng.; New York.....1300 10th Street  
 Frizzell, Genevieve Margaret, T. C.; District of Columbia,  
 241 8th Street N.E.  
 Galbraith, Esther Elizabeth, C. C.; District of Columbia,  
 3425 14th Street N.E.  
 \*Galbraith, Robert Karl, Eng.; District of Columbia...1735 1st Street  
 Galloway, Alfred E., C. C.; Ohio.....617 Y. M. C. A. Bldg.  
 Gantley, Helen Gertrude, T. C.; District of Columbia,  
 2425 18th Street N.W.  
 Garland, George W., C. C.; District of Columbia,  
 1354 North Carolina Avenue N.E.  
 Garner, Alan Freeman, C. C.; District of Columbia. 1236 Euclid Street  
 Garner, Tully Charles, C. C.; Texas.....1120 Vermont Avenue  
 Garnett, Ellen, C. C.; District of Columbia.....2013 Q Street  
 Gatchell, Marie Ellen, C. C.; District of Columbia..1736 Park Road N.W.  
 George, Harold L., C. C.; Massachusetts.....1200 N Street N.W.  
 Gersdorff, Wilbur A. J., C. C.; District of Columbia,  
 1825 North Capitol Street

- Gessford, Margaret, T. C.; District of Columbia....1351 Irving Street  
 Getty, Annie Graham, T. C.; District of Columbia.1801 Calvert Street  
 Giantvalley, Earl Arnold, C. C.; Minnesota.....National Museum  
 Gibbs, Kate Maria, T. C.; Massachusetts.....3703 14th Street  
 \*Gilbert, Russell Lofton, C. C.; District of Columbia,  
     230 9th Street N.E.  
 \*Gilmore, Daniel B., C. C.; Alabama.....108 V Street N.E.  
 Goddard, Eunice F., C. C.; Maine.....The Magnolia  
 Goodman, Leopold A., C. C.; Massachusetts.....1130 6th Street N.W.  
 Gore, Michael Alvoid, C. C.; District of Columbia,  
     1147 New Hampshire Avenue  
 Gottschall, Andrew William, C. C.; Pennsylvania,  
     201 Anacostia Avenue, Benning, D. C.  
 \*Grady, Jenny Powell, C. C.; District of Columbia,  
     3122 Q Street N.W.  
 Green, Andrew Jordan, C. C.; District of Columbia,  
     1804 M Street N.W.  
 Green, Elsie Eugenia, C. C.; District of Columbia,  
     600 23rd Street N.W.  
 Green, Myrtle Annie, T. C.; District of Columbia,  
     1317 Maple View Place S.W.  
 Griffith, Alice Eleanor, C. C.; District of Columbia...1846 Ontario Place  
 \*Griffith, Thomas Edward, Eng., e.; District of Columbia,  
     1120 Rhode Island Avenue N.W.  
 \*Groves, George Summer, Eng., a.; Virginia..809-10 McLaughlin Bldg.  
 Grunwell, Maude E., C. C.; Maryland.....1807 H Street  
 Gsantner, Otto Carl, Jr., C. C.; District of Columbia,  
     2811 24th Street N.E.  
 †Gunther, Kate Whitecomb, C. C.; District of Columbia,  
     2129 18th Street  
 Hafford, Thomas A., Eng., c.; New York.....1215 O Street  
 Haines, Margaret, C. C.; Pennsylvania.....922 19th Street N.W.  
 Hale, MacFarland, Eng., m.; Iowa.....613 Columbia Road  
 \*Haley, Jodie Louise, T. C.; South Carolina.....2106 G Street  
 Hall, Irwin W., Eng.; District of Columbia.....4528 9th Street  
 Hall, Walter J., C. C.; New York.....225 Indiana Avenue  
 Halsey, Arthur Sherman, Eng., m.; Pennsylvania,  
     207 East Capitol Street  
 Hamilton, Nancy Creel C. C.; Virginia.....The Westmoreland  
 Hamilton, Bettie Venable, C. C.; Virginia.....The Westmoreland  
 Hampton, Lucy Jeston, C. C.; Oklahoma.....1105 17th Street  
 Handelsman, Samuel, C. C.; New York.....1501 11th Street N.W.  
 Hanlon, Thomas J., C. C.; District of Columbia...715 11th Street N.E.  
 Hardy, Margaret Boude, C. C.; District of Columbia,  
     812 East Capitol Street  
 Harkness, Arthur Williams, C. C.; District of Columbia..2224 F Street

- †Harper, Charles W., C. C.; District of Columbia.....610 3rd Street  
Harris, Beverly Humphreys, Eng.; District of Columbia,  
1943 Biltmore Street  
\*Harris, Leah Irene, C. C.; Virginia.....2121 14th Street N.W.  
Harrison, Arthur P., C. C.; Maryland.....Takoma Park, D. C.  
Harsch, Erwin, Eng., c.; Ohio.....1318 Maryland Avenue, N.E.  
\*Hart, Leland P., C. C.; District of Columbia.....1916 Calvert Street  
Hart, Louise Goff, T. C.; West Virginia.....515 B Street N.E.  
Hart, Raymond Sagar, Eng., a.; District of Columbia..31 Adams Street  
Harter, Eugene C., C. C.; Ohio.....923 12th Street N.W.  
\*Hastings, Gertrude, C. C.; District of Columbia....905 B Street N.E.  
Hatfield, Harold DeWolfe, Eng., m.; Canada.....1822 H Street N.W.  
B.S., 1910, Connecticut State College.  
Hauser, Leon Aaron, Eng., c.; New Jersey,  
130 Rhode Island Avenue N.E.  
Hazlett, Sylvia Jane, C. C.; Pennsylvania.....2005 G Street N.W.  
Heald, Roy Hainer, Eng., m.; District of Columbia,  
1211 Shepherd Street  
Hebb, Bertha Yell, C. C.; District of Columbia....1408 M Street N.W.  
\*Heilprin, Gertrude, C. C.; District of Columbia..2620 University Place  
Heindl, Raymond A., Eng., e.; Wisconsin.....1006 11th Street N.W.  
Heine, Henry William, Eng., m.; District of Columbia,  
502 Rhode Island Avenue N.W.  
Heiss, Frank C., C. C.; New York.....1105 P Street  
Helgesen, Gladys Lenore, T. C.; North Dakota....107 Florence Court  
Hellman, Dorothy, T. C.; Wyoming.....2804 Cathedral Avenue  
\*Hellman, Florence S., C. C.; Wyoming.....2804 Cathedral Avenue  
Hellmuth, Everett Albert, C. C.; Virginia,  
108 N. Alfred Street, Alexandria, Va.  
Henckels, Theodora Katherine, C. C.; District of Columbia,  
3614 Newark Street  
Henry, C. C., C. C.; Tennessee.....2036 F Street N.W.  
Herndon, Neal N., Eng., m.; Alabama.....1515 Vermont Avenue  
\*Herring, Annette S., C. C.; West Virginia.....1213 Delafield Place  
Heron, Louis Mann, Eng., e.; District of Columbia.....1440 R Street  
Hicks, Russell E., C. C.; Maryland.....Rockville, Md.  
Hidnert, Peter, Eng.; New York.....827 5th Street  
\*Higgins, James H., C. C.; District of Columbia.....1102 L Street  
Higley, Theodore, C. C.; District of Columbia.....2518 17th Street  
Hill, John Noble, C. C.; Oklahoma.....The Roland, Apartment 21  
Hinton, Raymond James, Eng., c.; New York.....1834 K Street  
Hinzan, Ada Louise, T. C.; Kentucky.....1400 29th Street  
Hitz, Martha Suzanne, C. C.; District of Columbia,  
2212 Channing Street N.E.  
Hobbs, Ewart William, C. C.; Illinois.....1370 Perry Place N.W.  
Hobgood, Katherine White, T. C.; Louisiana...3631 10th Street N.W.  
\*Hobson, Julius Allan, Jr., C. C.; Maryland.....Brentwood, Md.



- †Hodge, Paul F., C. C.; District of Columbia.....2312 19th Street  
 Hodgkins, Harry Grant, Jr., Eng., e.; Maryland.....Bethesda, Md.  
 Hoffman, Arthur Joseph, C. C.; New York.....Bureau of Standards  
 \*Holdridge, Anna Pauline, C. C.; District of Columbia,  
 2715 P Street N.W.  
 Hollister, Mabel Pfrimmer, C. C.; Arkansas.....1338 Oak Street N.W.  
 \*Holt, Amanda Hamilton, T. C.; Pennsylvania....218 3rd Street N.W.  
 Horn, Arthur, C. C.; Illinois.....1017 12th Street  
 Horner, Elva E., C. C.; Pennsylvania.....The Victoria, Apartment 34  
 Hotchkiss, Helen R., C. C.; District of Columbia....2 Kendall Green  
 Huff, Elkanah Wynn, C. C.; Colorado.....2152 F Street N.W.  
 Hughes, Lotus Graham, C. C.; West Virginia.....701 Munsey Bldg.  
 Hughes, Mildred May, C. C.; District of Columbia...218 6th Street S.E.  
 Hull, Flora, C. C.; Nebraska.....The Iowa  
 Hunsinger, Belford E., C. C.; Ohio.....151 Uhland Terrace N.E.  
 \*Hunt, Dorothy, C. C.; Texas.....1353 Euclid Street  
 Hunt, Estelle J., C. C.; Texas.....1353 Euclid Street  
 Hunt, Paul Jamison, C. C.; District of Columbia...1204 Girard Street  
 \*Hurd, Willis L., C. C.; District of Columbia.....1737 Park Road  
 \*Hurley, John J., Jr., Eng.; District of Columbia...60 K Street N.W.  
 A.B., 1907, Rock Hill College.  
 Hutchison, Frances Elizabeth, T. C.; Virginia.....719 A Street S.E.  
 \*Hutterly, Andrew J., C. C.; District of Columbia...61 R Street N.W.  
 Hyland, Meda Virginia, C. C.; District of Columbia,  
 712 G Street N.E.  
 Ignasiak, John A., C. C.; Pennsylvania.....1227 11th Street N.W.  
 Ingle, Mark James, C. C.; Pennsylvania.....1736 G Street N.W.  
 University of Pennsylvania, 1907.  
 \*Ingram, Charlton Weber, Eng., m.; District of Columbia,  
 713 Taylor Street N.W.  
 Jackson, Carrie O., C. C.; District of Columbia.....Carlisle Court  
 James, William Stubbs, Eng., m.; Massachusetts...1504 R Street N.W.  
 Jeffery, Warren Perry, Eng., a.; Washington....1502 Vermont Avenue  
 Jeffrey, Earl Munro, C. C.; Wisconsin.....3124 Wisconsin Avenue  
 Jeffries, John Miller, C. C.; District of Columbia,  
 1800 New Hampshire Avenue  
 Jelleff, Eleanor Porter, (Mrs. F. P.) Eng.; District of Columbia,  
 3360 Mt. Pleasant Street  
 \*Joerissen, Carl A., C. C.; District of Columbia....The Rochambeau  
 John, Walton Colcord, T. C.; District of Columbia,  
 348 Eastern Avenue, Takoma Park, D. C.  
 A.B., 1913, Mary Keener Institute, Mexico City.  
 †Johns, Laura Steiner, C. C.; Texas.....1901 F Street  
 Johnson, Joseph Travis, Jr., C. C.; South Carolina,  
 316 Maryland Avenue N.E.  
 Johnson, Virginia Head, T. C.; District of Columbia,  
 1423 R Street N.W.



- Johnson, William Trimble, Jr., Eng.; Massachusetts,  
1701 Euclid Street
- \*Johnsonius, Alexander, C. C.; Tennessee.....128 B Street N.E.
- †Jones, Harry B., C. C.; New Jersey.....1739 F Street
- Jordan, Edna M., C. C.; New Hampshire.....The Victoria
- Kain, Helen Gladys, C. C.; District of Columbia...222 E Street N.W.
- Kaiser, Edward J., Eng.; District of Columbia....331 13th Street S.E.
- Karger, Theresa, C. C.; District of Columbia...2616 Cathedral Avenue
- Kass, John, Eng., e.; Michigan.....Y. M. C. A.
- Kause, Arthur J., C. C.; Ohio.....1905 Jackson Street N.E.
- Kause, Robert Lincoln, Eng., e.; Ohio.....1905 Jackson Street N.E.
- Kause, Selma, T. C.; Ohio.....1905 Jackson Street N.E.
- Keenan, Gerald J., Eng., c.; New York.....1826 G Street N.W.
- \*Keighley, John F. M., C. C.; Rhode Island....1007 13th Street N.W.
- Keister, James Lewis, Eng.; District of Columbia...1711 7th Street N.W.
- Kellberg, Ira N., C. C.; District of Columbia.....1845 Calvert Street
- †Kenealy, Delia M. C. C.; District of Columbia,  
44 New York Avenue N.W.
- Kerby, Florence Marcellina, T. C.; District of Columbia...2606 L Street
- †Kerby Katharine, C. C.; District of Columbia.....2606 L Street  
A.B., 1913, George Washington University.
- Kerlin, Malcolm, C. C.; New Jersey.....1449 Fairmont Street
- \*Keys, Olive M., C. C.; District of Columbia....37 Adams Street N.W.
- Kimball, Dorothy, C. C.; District of Columbia,  
1819 Monroe Street N.W.
- Kimmel, Gertrude Louise, C. C.; District of Columbia,  
1454 Monroe Street
- Kingsbury, Joseph Bush, C. C.; Iowa.....2323 Ashmead Place
- Kingsbury, Orrin Dean, Eng.; Iowa.....2323 Ashmead Place
- Kirby, Virginia, T. C.; District of Columbia....1347 Parkwood Place
- \*Kirchner, Lester Frank, C. C.; District of Columbia....407 P Street
- Kish, Alexander, C. C.; Ohio.....1021 Vermont Avenue
- \*Klager, Karoline, C. C.; Michigan.....3157 Mt. Pleasant Street
- Klinge, Ernest F., C. C.; District of Columbia.....257 N Street
- Klopper, Lewis White, Eng., e.; District of Columbia,  
6404 Georgia Avenue
- Knotts, Morgan Kingory, Eng.; West Virginia ....115 5th Street N.E.
- Knowles, Margaret Morton, T. C.; District of Columbia,  
132 R Street N.E.
- Kothe, Charles, T. C.; New York.....807 18th Street
- Krafft, Carl F., C. C.; Washington.....1104 12th Street
- Kruger, Henry Alexander, Eng.; District of Columbia,  
726 9th Street S.E.
- Krumrein, Louis Frederick, C. C.; Maryland.....24 Grant Place
- Kuehn, Herman A., Eng., c.; Indiana .....411 P Street N.W.
- Kuohnel, George Daniel, C. C.; District of Columbia,  
625 Massachusetts Avenue N.E.

- \*Lamb, W. H., C. C.; Nebraska.....Y. M. C. A.  
 \*Lane, Katherine White, C. C.; Virginia.....Clarendon, Va.  
 \*Larson, August Einar, Eng., m.; Sweden.....1730 18th Street N.W.  
 Lasier, Harriet Catherine, C. C.; New Hampshire..1427 Girard Street  
 Laughlin, Earl Cletus, Eng., e.; Wisconsin..1330 Vermont Avenue N.W.  
 Lawson, Margaret Lucile, T. C.; District of Columbia,  
 206 13th Street N.E.  
 Lea, Harvey G., C. C.; Arkansas.....642 C Street N.E.  
 Lee, Wm. Canfield, C. C.; Kansas,  
 Dairy Division, Department of Agriculture  
 Leetch, Henry Winship, C. C.; District of Columbia...3259 R Street  
 Leland, Leonard Jesse, Eng.; New York.....27 9th Street N.E.  
 Leonard, Lewis Thompson, C. C.; District of Columbia..520 G Street N.E.  
 Lewis, Allen Daniels, Eng., m.; District of Columbia,  
 1800 8th Street N.W.  
 Lewis, Charles Harold, C. C.; District of Columbia..Takoma Park, D.C.  
 Lewis, Cuthbert Austin, Eng.; District of Columbia..431 Newton Place  
 †Lewis, Ollie L., C. C.; Kentucky.....2226 Decatur Place  
 Lewis, Sadie L., C. C.; District of Columbia....3919 Georgia Avenue  
 Leyburn, Nellie Cummings, T. C.; Maryland.....Hyattsville, Md.  
 Lindsey, Irving, Eng., e.; Virginia..1009 Gibbon Street, Alexandria, Va.  
 Lockwood, Charlotte Eleanor, T. C.; Virginia,  
 R. F. D. No. 4, Washington, D. C.  
 Lockwood, Jane Girvan, T. C.; District of Columbia,  
 R. F. D. No. 4, Washington, D. C.  
 Lockwood, Margaret Mary, T. C.; District of Columbia,  
 R. F. D. No. 4, Washington, D. C.  
 Love, Ellen Lane, C. C.; Virginia.....910 Massachusetts Avenue  
 Love, Rebecca Laurence, C. C.; Virginia...910 Massachusetts Avenue  
 Lowe, Emory R., C. C.; Maryland.....care Civil Service Commission  
 Lowe, Mrs. Josephine D., C. C.; District of Columbia,  
 2622 Woodley Place  
 Lowe, Henry Burton, C. C.; Virginia.....215 5th Street N.E.  
 \*Luckett, Margaret E., C. C.; District of Columbia..643 6th Street N.E.  
 \*Luckings, Harry C., C. C.; New Jersey.....508 7th Street  
 Lufburrow, Norman A., C. C.; New Jersey.....1912 G Street N.W.  
 \*Luxford, Donald Lloyd, C. C.; Michigan.....Y. M. C. A.  
 Lynch, Charles Rust, C. C.; Virginia.....1903 N Street  
 Lynch, George Clifton, Eng.; District of Columbia..4007 5th Street N.W.  
 \*Lynch, James Joseph, C. C.; Massachusetts...1206 10th Street N.W.  
 \*Lyons, John H., C. C.; District of Columbia.....4225 8th Street  
 McAuley, Hugh Nisbet, Eng.; District of Columbia....The Cordova  
 McCleary, Dorothy, C. C.; District of Columbia.....217 I Street  
 McCoach, Anna, T. C.; District of Columbia, 2022 North Capitol Street  
 McCormick, John D., Eng., e.; District of Columbia,  
 1377 North Carolina Avenue  
 MacFarlane, Nellie Rae, T. C.; District of Columbia..2005 G Street N.W.

- McGill, Marie Cecilia, T. C.; District of Columbia. 149 12th Street N.E.  
 McKnew, Donald Harrison, C. C.; District of Columbia,  
 The Burlington  
 McKnight, Anna Lelia, C. C.; District of Columbia. . . . 3935 7th Street  
 McLaughlin, DeWitt Terheron, C. C.; Texas. . . . 1359 Spring Road  
 \*Mackintosh, Earl Middleton, C. C.; District of Columbia,  
 2729 11th Street  
 MacMurray, Charles Howard, Eng.; New York. . . . 54 Adams Street  
 Magie, Hazel, C. C.; Maryland. . . . Bethesda, Md.  
 Magoffin, Dorothy, C. C.; District of Columbia. . . 1680 Irving Street  
 Magruder, Oliver Graham, Eng., c.; District of Columbia,  
 765 Quebec Street  
 \*Mallinson, Elizabeth Louise, C. C.; District of Columbia. The Farragut  
 †Mann, Lester B., C. C.; Georgia. . . . U. S. Patent Office  
 Manning, Thomas R., C. C.; District of Columbia. 22 2nd Street N.E.  
 \*Marks, George E., C. C.; District of Columbia. 58 Randolph Place N.W.  
 Marks, Joseph, Eng., c.; District of Columbia. . . . 903 F Street N.E.  
 \*Marthinson, Detlow Mainch, C. C.; District of Columbia,  
 1464 Girard Street  
 Martin, Caroline Matilda Benning, T. C.; District of Columbia,  
 57 T Street N.E.  
 Martin, Frank W., Eng., m.; District of Columbia. . . . 60 M Street  
 \*Martin, Wilbur Lynn, C. C.; New York. . . . 1736 G Street N.W.  
 Maryman, J. Edgar, C. C.; District of Columbia,  
 1304 Emerson Street N.W.  
 Mason, Charles Sumner, Eng., a.; District of Columbia. 1747 F Street  
 Mason, Josephine Dwight, T. C.; District of Columbia,  
 1348 Euclid Street  
 Mason, Samuel Worcester, Eng., e.; District of Columbia,  
 308 B Street N.E.  
 \*Mattern, David Lewis, C. C.; District of Columbia,  
 1211 New Jersey Avenue  
 Matthews, Etta Helene, T. C.; District of Columbia,  
 125 New York Avenue  
 Maxson, Louis Archer, Eng.; Maryland. . . . Library of Congress  
 A.B., 1913, George Washington University.  
 Meany, Lloyd Emmart, Eng., c.; District of Columbia. 908 23rd Street  
 Meek, Lois Hayden, T. C.; District of Columbia,  
 59 Rhode Island Avenue  
 Meese, Norman S., C. C.; New York. . . . 1601 15th Street  
 Mehurin, Roger Melville, C. C.; District of Columbia,  
 2031 F Street N.W.  
 Meloy, Edith Willard, T. C.; District of Columbia. 1309 Emerson Street  
 Mentzer, Florence Eberly, C. C.; Pennsylvania,  
 605 North Carolina Avenue S.E.  
 Michael, Jr., John William, Eng.; New York,  
 18 New York Avenue, N.E.



†Middleton, Ellis, S., C. C.; District of Columbia..1834 Lamont Street  
 Middleton, George Elmer, C. C.; District of Columbia..3412 13th Street  
 Middleton, Herbert Paul, Eng., e.; New York....care State Department  
 Middleton, Susie Ruth, C. C.; District of Columbia,

915 20th Street N.W.

Middleton, William, C. C.; Virginia.....East Falls Church, Va.

\*Miller, Annette Searle, C. C.; District of Columbia,

Apartment 24, The Fairfax

\*Miller, James Westcott, C. C.; District of Columbia,

330 South Carolina Avenue S.E.

Miller, Karl Willett, C. C.; District of Columbia.....44 V Street

Miller, Odver Harrison, Eng., e.; Oklahoma.....1312 Fairmont Street

Milliken, Florence Ethel, T. C.; District of Columbia,

463 P Street N.W.

Miner, Helen, C. C.; Ohio.....1613 Irving Street

Mitchell, John LeRoy, Eng., m.; District of Columbia.1241 B Street S.E.

\*Moody, Leander, J., C. C.; Maine.....1 Grant Place

Moore, James Ballard, Eng.; District of Columbia.1769 Columbia Road

LL.B., 1913, George Washington University.

Moore, Louise M., C. C.; District of Columbia..45 Quincy Place N.W.

\*Moore, Susanne A., T. C.; District of Columbia..101, The Wellington

Moorman, Fannie Amanda, T. C.; Virginia.....The Alamo

\*Moreland, John Edwin, Eng., e.; District of Columbia.1113 15th Street

Morgan, Katherine, T. C.; District of Columbia.2425 18th Street N.W.

Moriarty, Ernest Condit, Eng., e.; Virginia,

Ordnance Office, War Department

B.S. in E.E., 1912, Cooper Union.

\*Morrison, Hugh Shannon, Eng.; District of Columbia,

729 15th Street N.W.

\*Mosher, Edith R., C. C.; District of Columbia.....The Dewey

Moyer, Florence Willard, C. C.; District of Columbia,

7 Park Avenue, Drummond, Md.

Mueden, Pauline, C. C.; District of Columbia.....The Portner

Muench, Elsa Dorothea, C. C.; District of Columbia

3425 14th Street N.E.

Mulford, Bessie Boyd, T. C.; District of Columbia..3014 Dent Place

\*Muncey, Eliot May, C. C.; District of Columbia,

Department of Agriculture

Munger, Hester Irene, C. C.; District of Columbia,

1618 North Capitol Street

†Murlin, Don Elbert, Eng., e.; District of Columbia,

1874 Monroe Street

\*Murray, John William, C. C.; District of Columbia,

2313 Pennsylvania Avenue

Murray, Thomas Patrick, Eng.; Massachusetts.....1830 G Street

Munson, Orlie J., Eng.; Michigan.....2019 1st Street N.W.



- †Naetzker, Louis, C. C.; New York.....1810 G Street  
 Nash, James P., Eng., c.; Pennsylvania...1100 Vermont Avenue N.W.  
 Neeham, Arthur E., C. C.; Massachusetts.....War Department  
 †Negley, Marion Dearborn, Eng.; Virginia,  
     221 S. Pitt Street, Alexandria, Va.  
 Nelson, Agnes Edna, C. C.; Wisconsin.....2240 Cathedral Avenue  
 Nelson, Axel, C. C.; Minnesota.....104 C Street N.E.  
 Nelson, Byron Christopher, C. C.; Wisconsin. 2240 Cathedral Avenue  
 Nelson, Ina Forrest, C. C.; District of Columbia.1308 Belmont Street  
 †Nelson, Norman J., C. C.; North Dakota.....1739 F Street  
 Neumann, Frederika, C. C.; District of Columbia...701 A Street S.E.  
 Neumann, Louis D., C. C.; Illinois.....1108 15th Street N.W.  
 Neuman, Meta, C. C.; District of Columbia.....707 A Street S.E.  
 Newhouser, Enola Harriet, T. C.; District of Columbia,  
     217 East Capitol Street  
 Nichol, James Wallace, C. C.; District of Columbia,  
     Bureau of Corporations  
 \*Nicholas, George Emmet, C. C.; District of Columbia..719 8th Street  
 Nichols, Helen Gilman, T. C.; District of Columbia,  
     2604 University Place  
 Nickel, William, Eng.; Colorado.....Y. M. C. A.  
 Nickles, Edward Belmer, Eng., m.; District of Columbia,  
     122 Florida Avenue N.W.  
 Niess, Edward Mark Carvell, C. C.; District of Columbia,  
     61 Rhode Island Avenue  
 Noonan, Thomas William, Eng.; New York.....1226 Euclid Street  
 Norman, Caroline B., C. C.; Maryland.....Pension Bureau  
 Norris, Dorus Helen, C. C.; District of Columbia....35 Q Street N.E.  
 Norton, Cecil Brooks, T. C.; District of Columbia....1908 9th Street  
 Norton, Frederick Aloysius, C. C.; Massachusetts,  
     Bureau of Chemistry  
 Nottingham, William Warde, Eng.; District of Columbia,  
     Apartment 4, 121 12th Street S.E.  
 Nussear, Charles F., Eng.; District of Columbia..248 11th Street S.E.  
 Oberholser, Harry Church, C. C.; New York.1444 Fairmont Street N.W.  
 Offut, Magruder Wilson, Jr., Eng.; Maryland.....Bethesda, Md.  
 O'Halloran, Thomas Stuart, Eng.; District of Columbia,  
     2210 F Street N.W.  
 \*O'Hara, Elizabeth, T. C.; District of Columbia....135 S Street N.W.  
 \*O'Leary, Arthur E., C. C.; Massachusetts.....911 M Street  
 Ostrow, Walter W., C. C.; Virginia.....938 F Street N.W.  
 Owens, Howard Clifton, C. C.; Maryland.....529 18th Street  
 Owens, Thomas Guy, C. C.; Maryland.....529 18th Street  
 Owens, Walter J., C. C.; District of Columbia.Newport Apartment 41  
 Pahl, L. F. William, C. C.; District of Columbia...Congress Heights  
 Parrack, Cecil A., C. C.; West Virginia.....800 21st Street N.W.  
 Parris, Morris Addison, C. C.; District of Columbia....3022 P Street

- Passmore, Senes Breton, Eng.; Pennsylvania.....115 5th Street N.E.  
 Patrick, Erwin Chambers, Eng.; District of Columbia,  
 600 23rd Street N.W.  
 Patrick, Nelle Freeland, T. C.; Missouri.....755 Harvard Street  
 Patrick, Wellington, T. C.; District of Columbia..755 Harvard Street  
 Patterson, Ruth Capelle, T. C.; District of Columbia,  
 2016 15th Street  
 †Patterson, Robert W., 3rd, C. C.; District of Columbia,  
 1309 Kenyon Street  
 \*Paul, Frieda Elizabeth, C. C.; Pennsylvania..1707 No. Capitol Street  
 Paul, Mabel Spenser, C. C.; District of Columbia..3537 Holmead Place  
 Paul, Walter Edwin, C. C.; Illinois.....3537 Holmead Place N.W.  
 Payne, James Stanley, C. C.; District of Columbia,  
 818 North Carolina Avenue S.E.  
 Paynter, Vernon E., C. C.; Virginia.....The Cairo  
 Peck, Allen Eugene, Eng., m.; District of Columbia,  
 1448 Fairmont Street  
 Peet, Elizabeth, C. C.; District of Columbia,  
 Gallaudet College, Kendall Green  
 \*Peters, Joseph W., C. C.; Missouri...1914 Avenue of The Presidents  
 Petrie, John S., Eng., m.; District of Columbia..2815 6th Street N.E.  
 \*Phillips, Cecelia Day, C. C.; District of Columbia,  
 832 Rittenhouse Street  
 Phillips, George Washington, C. C.; District of Columbia,  
 612 18th Street N.W.  
 Phillips, John William, C. C.; Washington.....The Cumberland  
 Phoebus, Mildred Anna, C. C.; District of Columbia,  
 1925 North Capitol Street  
 \*Pimper, Frederick William, C. C.; District of Columbia,  
 1302 30th Street  
 Piper, Edgar Raymond, C. C.; Connecticut.....2106 F Street  
 \*Planck, Mildred Marion, C. C.; Nebraska.2224 F Street, Apartment 32  
 Pope, Ruth Vesta, C. C.; California.....1340 Meridian Place  
 Pope, George S., Eng., m.; District of Columbia,  
 1321 East Capitol Street  
 Popkin, Hymen, C. C.; New Jersey.....616 E Street  
 \*Potbury, Robert John, Eng.; District of Columbia,  
 1131 Euclid Street  
 B.S. in C.E., 1912, George Washington University.  
 Powell, Jos. R., Eng.; Louisiana.....1324 Q Street N.W.  
 \*Posey, Jane, T., C.; District of Columbia.....1225 Euclid Street  
 \*Pou, George Rose, C. C.; North Carolina..107 Maryland Avenue N.E.  
 Powell, Adele Grenet, T. C.; District of Columbia.....The Dresden  
 Powell, William Henry, C. C.; Virginia.....1508 P Street N.W.  
 Preinkert, Alma Henrietta, C. C.; District of Columbia..1511 L Street  
 Price, Virginia Williams, T. C.; District of Columbia,  
 1104 East Capitol Street

- Prince, Ethel Thomas, T. C.; District of Columbia..161, The Portner
- \*Prosise, Alan Brooke, Eng.; Virginia..1107 Rhode Island Avenue N.W.
- †Prouty, Frances, C. C.; Iowa .....2610 Woodley Place
- Pusey, Elmer M., C. C.; District of Columbia.....Gallaudet College
- Putnam, John Risley, C. C.; Arizona,  
care George R. Putnam, Light House Commissioner
- Pywell, Laura Virginia, T. C.; District of Columbia..72 V Street N.W.
- Quinlan, Margaret Marie, C. C.; New York.....539 21st Street
- \*Rader, Frank Joseph, Eng.; District of Columbia..903 G Street S.E.
- Rager, Amy Elizabeth, C. C.; District of Columbia, 812 21st Street N.W.
- Ramage, Laeta Marion, T. C.; District of Columbia,  
1804 Wyoming Avenue
- Ramsdell, Paul, Eng., c.; District of Columbia.1945 Calvert Street N.W.
- Ramsey, Herbert Percy, C. C.; District of Columbia,  
813 Massachusetts Avenue N.E.
- Randall, Bernice, T. C.; District of Columbia.....2035 F Street
- \*Rattner, Abraham, Eng., m.; New York.....1400 K Street N.W.
- Raymond, Norman Tichnor, C. C.; New Jersey...1406 Allison Street
- Reavis, Andrew Bryant, Eng.; Tennessee.1502 Vermont Avenue N.W.  
A.B., 1912, George Washington University.
- Reed, Clare L., C. C.; District of Columbia.308, The Northumberland
- Reese, Ada Elizabeth, C. C.; District of Columbia,  
1445 Clifton Street N.W.
- \*Reese, Clement Milton, Eng., m.; Maryland.....Y. M. C. A.
- Reeve, Felicia Ann, T. C.; District of Columbia.....1626 19th Street
- \*Reeve, Laura Washburn, T. C.; District of Columbia,  
1626 19th Street N.W.
- Reid, James Osborne, Eng., c.; Louisiana.....931 M Street N.W.
- †Renand, Frank H., Eng.; Illinois.....Room 631, Y. M. C. A.
- Renner, Wilbert Vernon, Eng., c.; District of Columbia,  
1405 F Street N.W.
- \*Rice, Samuel W., Eng., c.; District of Columbia.2217 Q Street, N.W.
- Richard, Charles Bailey, Eng.; Colorado.....1860 Mintwood Place
- Richards, Henry Tilton, T. C.; District of Columbia,  
Apartment 4, The Landmore
- Richards, Ivah, T. C.; District of Columbia.1439 Rhode Island Avenue
- Richardson, Della Dean, C. C.; District of Columbia...1806 K Street
- Riley, Thora M., C. C.; District of Columbia.....2141 LeRoy Place
- Riordan, Charles E., Eng.; Massachusetts.....916 15th Street N.W.
- Robinson, Ednah Florence, T. C.; District of Columbia.2817 28th Street
- \*Rochon, Louise Antoinette, C. C.; District of Columbia.3303 13th Street
- \*Rogers, Earl H., Eng.; Virginia...R. F. D. No. 4, Washington, D. C.
- Rohrer, Joseph R., C. C.; Ohio.....2112 F Street
- †Romney, Kenneth, C. C.; Montana.....House Office Building
- \*Rorke, George Gordon, C. C.; District of Columbia.223 A Street N.E.
- Rose, Leonard Julian, Eng., c.; District of Columbia..708 19th Street
- Rose, Mary Estelle, T. C.; District of Columbia.2963 Tilden Street N.W.



- \*Rosenberg, Samuel Lee, Eng., e.; District of Columbia,  
655 16th Street N.E.
- Rowley, Clifford A., Eng.; South Dakota.....1344 Kenyon Street  
M.P.L., 1909; S.B., 1911, George Washington University: LL.B.,  
1909; LL.M., 1912 National University Law School.
- Ruff, Julia Elizabeth, C. C.; District of Columbia..505 A Street S.E.
- Russell, Paul G., C. C.; District of Columbia..3538 Warder Street N.W.
- Rydalch, William Noble, C. C.; Utah.....207, Y. M. C. A.
- St. Clair, Albert Thurston, C. C.; District of Columbia,  
1319 T Street N.W.
- Salant, Annie (Mrs.) C. C.; District of Columbia.....3429 34th Place
- Sale, Prentiss Dixon, Eng., c.; District of Columbia.225 8th Street N.E.
- Sanders, Elsie, T. C.; District of Columbia.....1515 Park Road
- Saunders, Harold George, C. C.; District of Columbia...Y. M. C. A.
- Saunders, Randall Nash, Eng., m.; District of Columbia,  
1534 6th Street N.W.
- Scala, Norman P., C. C.; District of Columbia,  
918 South Carolina Avenue S.E.
- Scales, Freeman M., C. C.; District of Columbia,  
The Glen, No. 2, Quarry Road
- Scharff, Stella Wilhelmina, C. C.; District of Columbia..620 5th Street
- \*Schellfeffer, Frank, C. C.; Illinois.....Y. M. C. A.
- Schenck, Stella R., (Mrs.) C. C.; Indiana...514 Kenyon Street N.W.
- †Schladt, George J., Eng., e.; Maryland.....Potomac Heights, D.C.
- Schmidt, Reuben, C. C.; District of Columbia.....13 H Street N.W.
- \*Schmitt, Edwin Alexis, Eng., e.; District of Columbia,  
Ridgewood Avenue, Chevy Chase, Md.
- Schoenfeld, Rudolf Emil, C. C.; District of Columbia,  
3448 34th Place, Cleveland Park, D. C.
- Schragenheim, Betty, C. C.; Germany.....1822 Lamont Street
- \*Schul, Louise, C. C.; District of Columbia.....110 C Street N.E.
- Schwarsmann, Elsie Pearl, C. C.; Virginia,  
117 N. Alfred Street, Alexandria, Va.
- Scott, Howard, C. C.; District of Columbia..1715 Euclid Street N.W.
- Scott, Mabel Lavinia, C. C.; District of Columbia..1455 Girard Street  
A.B., 1907, George Washington University.
- Scovill, Almeda Higgins, T. C.; Connecticut.910 Massachusetts Avenue
- Seamon, Alexander Rives, C. C.; Virginia. Drawer 148, Alexandria, Va.
- \*Searle, Juliet MacCall, T. C.; District of Columbia,  
1131 12th Street N.W.
- Seibold, Theodosia Darling, C. C.; District of Columbia,  
756 Rock Creek Church Road
- Seler, Alfred Grove, C. C.; District of Columbia,  
American University Park
- Seip, Albert Birney, Eng.; District of Columbia.2622 13th Street N.W.
- Selah, Miriam Highes, T. C.; District of Columbia..17 3rd Street N.E.



- Seltzer, Harry Gabriel, T. C.; Pennsylvania.....1312 23rd Street  
 Shaffer, Joseph M., C. C.; Massachusetts. ....801 4½ Street S.W.  
 Shanley, Rebecca E., T. C.; Pennsylvania...623 North Capitol Street  
 †Sheffield, Edgar L., C. C.; District of Columbia.....1017 12th Street  
 Shipley, Joseph Wilson, Eng.; Maryland.....Hyattsville, Md.  
 Shoemaker, Fred Eugene, Eng., e.; District of Columbia..147 T Street  
 Short, Helen M., C. C.; District of Columbia.....1511 Park Road  
 Shuman, Royal Lewis, C. C.; Pennsylvania.....3519 14th Street  
 Silvester, Jane B., C. C.; District of Columbia..2005 Kalaroma Road  
 Simpson, Francis Porter, C. C.; Montana .....23 1st Street N.E.  
 Skinner, Arthur William, Eng., m.; Maryland....Takoma Park, D. C.  
 \*Sligh, W. H., C. C.; South Carolina.....473 F Street S.W.  
 †Smith, Hawley Armistead, C. C.; District of Columbia,  
     637 Massachusetts Avenue N.E.  
 Smith, I. Wilmer, Eng.; District of Columbia.....610 M Street N.W.  
 \*Smith, James Leroy, Eng.; District of Columbia,  
     109 Rhode Island Avenue N.E.  
 \*Smith, Jessie MacLure, C. C.; Pennsylvania, 423 Massachusetts Avenue  
 Smith, Joseph S. W., C. C.; Pennsylvania...423 Massachusetts Avenue  
 Smith, McClain Barnitz, Eng., e.; Pennsylvania..658 Morris Street N.E.  
 \*Smith, Mai Francis, C. C.; District of Columbia..1326 Euclid Street  
 Smith, Raymond C., Eng.; District of Columbia...1002 B Street S.W.  
 Smith, Talma L., C. C.; Texas.....1201 Q Street  
 \*Smith, Walter Scott, C. C.; Virginia.R. F. D. No. 2, Alexandria, Va.  
 \*Smith, William F., Eng.; District of Columbia...1340 F Street N.E.  
 Snyder, Carl Francis, C. C.; District of Columbia...3111 16th Street  
 \*Snyder, Frederick H., C. C.; Maryland.....219 A Street S.E.  
 Snyder, Walter Douglas, Eng.; Wisconsin....U.S. Naval Observatory  
 Soule, Hope Mildred, C. C.; District of Columbia. 107 2nd Street N.E.  
 Southgate, Letitia Park, C. C.; District of Columbia,  
     1429 Fairmont Street N.W.  
 Sowders, Harold George, C. C.; Ohio.....Y. M. C. A.  
 Speake, Katherine G., C. C.; District of Columbia.The Westmoreland  
 Spear, Albert A., C. C.; District of Columbia....4 Sixth Street N.E.  
 \*Spear, Hiram E., Eng.; District of Columbia.1241 Morse Street N.E.  
 Spiker, Clarence Jerome, C. C.; District of Columbia,  
     2917 13th Street N.W.  
 Springer, Lew Wallace, C. C.; New Mexico.....The Dresden  
 \*Stahl, Benton M., C. C.; District of Columbia. 313 12th Street S.W.  
 Stancill, Edna Teresa, C. C.; Indiana, Apartment 26, 1444 W Street  
 †Starr, Arthur Price, Eng.; New York.....120 Randolph Place N.W.  
 Starr, Relda A., C. C.; District of Columbia.120 Randolph Place N.W.  
 Steele, Benjamin P., C. C.; District of Columbia,  
     38 Seaton Place N.W.  
 Steinberg, Aaron, C. C.; New York.....1109 14th Street  
 Steinberg, Abraham, C. C.; New York.....1109 14th Street

- †Steltz, Rachel Dorothy, C. C.; District of Columbia,  
611 North Carolina Avenue S.E.
- Sterling, Ralph J., C. C.; Ohio.....633 Y. M. C. A. Bldg.
- Sterrett, Grace Haver, C. C.; District of Columbia. 1229 Harvard Street
- Stewart, Elizabeth Tabb, T. C.; Virginia.....East Falls Church, Va.
- \*Stewart, Mary, T. C.; District of Columbia. 627 Maryland Avenue N.E.
- †Stockard, Marietta, T. C.; North Carolina.....1627 Lamont Street
- \*Stockett, Nellie, T. C.; District of Columbia....312 4th Street S.E.
- Stockton, Thomas Jefferson, Eng., e.; District of Columbia,  
1944 2nd Street N.W.
- Stoever, Frank Wallace, Eng. District of Columbia.. 2536 14th Street
- Stone, Edna L., C. C.; District of Columbia. 1618 Rhode Island Avenue
- Stonier, Harriet Marsh, Eng.; District of Columbia.....The Toronto
- Stout, Jane, C. C.; District of Columbia.....1435 9th Street
- †Straeten, Emretta Root, C. C.; District of Columbia. 1004 Park Road
- Stroop, David Vincent, Eng.; Maryland.....1729 New York Avenue
- Stuckert, Harry Eugene, Eng., e.; Arkansas.....Kensington, Md.
- Sturtevant, Georgia A., C. C.; District of Columbia. 2233 Q Street N.W.
- Stutler, H. Ward, Eng., a.; West Virginia.....Treasury Department
- Sullivan, Howard Cheseldine, Eng.; Maryland,  
Box 324, Mt. Rainer, Md.
- Summy, Ethel, T. C.; District of Columbia.....1623 R Street N.W.
- \*Swann, Theodore Magruder, C. C.; Virginia.....Clarendon, Va.
- \*Swartzell, Henry Rodley, C. C.; District of Columbia,  
2117 Bancroft Place
- Taggart, Earl, C. C.; Iowa.....1008 Euclid Street
- Tait, David Selwin, C. C.; District of Columbia, 2016 O Street N.W.
- Talcott, John J., Eng.; District of Columbia.....509 9th Street S.E.
- Tallman, H. W., C. C.; Michigan.....120 U Street N.W.
- Taylor, Florence M., C. C.; District of Columbia. 100 5th Street N.E.
- †Taylor, James Norman, C. C.; Delaware.....The Victoria  
B.S. in Chem., 1913, George Washington University.
- Taylor, Perry Edward, C. C.; Texas.....712 20th Street
- Taylor, Walter Madison, Eng.; Illinois.....142 Adams Street
- Temple, Grace Lincoln, C. C.; District of Columbia....The Farragut
- \*Tennyson, James Anna, T. C.; District of Columbia,  
1938 Biltmore Street
- Terry, Leo Claude, C. C.; District of Columbia,  
133 Quincy Place N.E.
- Terwisse, Anthony T., Eng., e.; District of Columbia,  
718 7th Street N.E.
- Thomas, Charles L., C. C.; Texas,  
State, War and Navy Bldg., Room 64
- †Thomas, Earle Van Buren, Eng.; District of Columbia,  
437 Rhode Island Avenue N.W.
- Thomas, Genevieve Elwood, C. C.; District of Columbia,  
3120 Mt. Pleasant Street

- Thomas, Lisle, C. C.; Michigan.....901 M Street  
 Thompson, George Dixon, C. C.; District of Columbia. 3155 19th Street  
 Thompson, Harry Woodward, C. C.; Iowa.....1340 Girard Street  
 Thornton, Smith Gordon, C. C.; Louisiana... 447 Senate Office Bldg.  
 Tietig, Chester, C. C.; Ohio.....1400 L Street N.W.  
 Tiffany, Emma Ruth, T. C.; District of Columbia,  
     3409 Brown Street N.W.  
 \*Tilton, Fletcher Sandford, C. C.; District of Columbia,  
     Library of Congress  
 Timm, Minnie Emelie, C. C.; Washington.....The Magnolia  
 Townsend, Anna C., C. C.; District of Columbia....The Buckingham  
 \*Townsend, George Lincoln, Eng.; Pennsylvania. 3221 13th Street N.W.  
 \*Townsend, T. H., Eng., c.; Texas.....1611 Lincoln Avenue N.E.  
 Townsend, Robert Swan, C. C.; District of Columbia. 1447 Irving Street  
 Troller, Anne, C. C.; Wisconsin.....702 20th Street  
 True, Marion, T. C.; District of Columbia.....1320 Fairmont Street  
 Tunstall, John Liggat, C. C.; District of Columbia. 1713 Kilbourne Place  
 Turrell, Elizabeth Carr, C. C.; Indiana.....3316 Mt. Pleasant Street  
 \*Tyler, Tom Thornburgh, C. C.; District of Columbia,  
     706 Randolph Street  
 Tyndall, Mary Siphord, T. C.; District of Columbia. 1008 I Street N.W.  
 Umback, Paul, Jr., Eng.; Missouri.....505 4th Street N.W.  
 Underwood, Mary Louise, T. C.; District of Columbia,  
     707 East Capitol Street  
 Upton, William Bayly, Jr., Eng.; District of Columbia,  
     3420 Newark Street, Cleveland Park, D. C.  
 \*Valaer, Peter, Jr., C. C.; District of Columbia,  
     Bureau of Internal Revenue  
 Vanderwerker, Mary Isabel, T. C.; District of Columbia,  
     308 East Capitol Street  
 VanDoren, Charlotte Augusta, T. C.; District of Columbia,  
     647 East Capitol Street  
 Van Doren, Emma May, T. C.; District of Columbia,  
     639 Massachusetts Avenue, N.W.  
 Van Kirk, Lloyd H., C. C.; Pennsylvania.....1854 Ingleside Terrace  
 Van Loock, Albert M., Eng.; District of Columbia. 104 15th Street N.E.  
 \*Vardaman, James K., Jr., C. C.; Mississippi....Senate Office Bldg.  
 Von Seyfried, Emma M., T. C.; New Jersey.....2308 20th Street  
 Vose, J. Raymond, C. C.; Kentucky.....2018 F Street N.W.  
 †de Waard, Enno, C. C.; Holland.....729 20th Street  
 \*Wade, Roy W., C. C.; Missouri.....2439 N Street  
 \*Waggaman, Mae E., C. C.; District of Columbia,  
     Plymouth Apartment  
 Wagner, David, C. C.; Russia.....1700 15th Street  
 Walker, Alberta, T. C.; District of Columbia....1634 S Street N.W.  
 Walker, Clarence Herman, C. C.; Pennsylvania...1736 G Street N.W.  
     B.S. in C.E.. 1912, University of Pennsylvania.



- Walters, Marion Irven, Eng.; District of Columbia,  
3228 Warder Street
- Walton, Melville R., C. C.; District of Columbia... 816 I Street N.E.
- Wanlass, Eva Page, C. C.; Utah..... 2106 F Street N.W.
- Wanlass, William L., C. C.; Utah..... 2106 F Street
- Wanstall, Grace, T. C.; District of Columbia.... 1706 F Street N.W.
- Warner, May, C. C.; Indiana..... 459 Luray Place N.W.
- Watskey, Jack, C. C.; Virginia..... Y. M. C. A. Bldg.
- \*Watson, Leo Paul, C. C.; Missouri..... 65 U Street N.W.
- Weaver, Amelia Elizabeth, C. C.; Oklahoma... 110 East Capitol Street
- Weber, Elizabeth, T. C.; Maryland..... Berwyn Heights, Maryland
- Weber, John Augustus, Eng., a.; Pennsylvania.... 518 6th Street N.E.
- Webster, John Fraser, C. C.; Oklahoma..... 1736 G Street
- Weinstein, Reuben, C. C.; New York..... 24 N Street N.W.
- West, Warren Reed, C. C.; District of Columbia... 304 D Street N.E.
- \*Weston, Elbertine Cowling, T. C.; District of Columbia,  
3447 Oakwood Terrace
- Wharton, Roger Daniel, Eng., c.; District of Columbia,  
3411 Oakwood Terrace
- Wheeler, Alden Meyers, C. C.; California..... 1764 K Street
- \*White, Walter Finton, C. C.; District of Columbia 307 C Street N.W.
- Whitford, Bessie, T. C.; District of Columbia..... 3369 18th Street
- Wilbur, Elizabeth Sabrina, C. C.; District of Columbia... 2107 S Street
- Wilhelm, Robert Mason, C. C.; Maryland..... 1845 Calvert Street
- Wilkins, Laurence Ordway, C. C.; District of Columbia,  
The Congressional
- Williams, Edith Arvonja, C. C.; District of Columbia,  
3512 11th Street
- Wilson, Edith Eleanor, C. C.; District of Columbia,  
620 14th Street N.E.
- Wilson, Joseph H., Eng., m.; Pennsylvania..... 1303 R Street
- Wilson, Margaret Posey, C. C.; District of Columbia. 219 1st Street N.E.
- †Wilson, Mary Badger, C. C.; North Carolina..... 1901 Q Street
- Wimer, Alfred Kingston, C. C.; District of Columbia.. 114 S Street N.W.
- Wimer, Martha E., T. C.; District of Columbia..... The Imperial
- Wingate, Charles Ludwell, C. C.; District of Columbia,  
2423 18th Street N.W.
- Wingate, Florence, C. C.; District of Columbia.... 2641 Garfield Street
- Winne, Rachel Augusta, C. C.; New York..... 1743 Church Street
- †Woldstad, Rachel M., C. C.; Massachusetts..... 718 19th Street
- Wolf, Ethel, C. C.; District of Columbia..... 235 W Street N.W.
- †Wolfe, Leo Addison, C. C.; Pennsylvania..... 2022 F Street
- \*Wong, Ung Ce, C. C.; China..... 1418 L Street
- †Wood, Thurston E., C. C.; District of Columbia..... 2143 N Street
- Woods, Frederick Davis, Eng.; Arkansas..... 1100 Vermont Avenue
- Woodward, Francis Albert, Eng., m.; District of Columbia,  
751 Quebec Street



Worrell, Everil, C. C.; District of Columbia..	The Naples, 715 19th Street
Worster, Louise, T. C.; District of Columbia.....	942 B Street S.W.
*Wright, John Holt, Eng.; District of Columbia.....	2109 18th Street
Wright, Leonora Haviland, T. C.; District of Columbia,	
	The Gladstone, 1423 R Street N.W.
Wu, Su-ying Chiao, C. C.; China.....	1825 Vernon Street
*Wynkoop, Adrian Garrett, Jr., C. C.; West Virginia,	
	Federal National Bank
Yerkes, Joseph Deal, C. C.; District of Columbia..	1365 Monroe Street
Wu, Ying, C. C.; China,	
	The Holland, Apartment No. 6, 1825 Vernon Street
Yoder, Bertha Alice, T. C.; District of Columbia....	1225 Euclid Street
Yoder, Bessie Lee, T. C.; District of Columbia.....	1225 Euclid Street
Yost, Elsie May, C. C.; District of Columbia,	
	1002 Pennsylvania Avenue S.E.
Zinssmeister, Grace Mary, T. C.; District of Columbia,	
	1364 Girard Street

## SUMMARY

## Graduate Students

Students in attendance.....	6	
Candidates for D.C.L. degree.....	1	
Candidates for C.E. degree.....	6	
Candidates for E.E. degree.....	2	
Candidates for M.E. degree.....	1	
Candidates for S.M. degree.....	27	
Candidates for A.M. degree.....	24	
Candidates for Ph.D. degree.....	27	
	94	
Duplicates.....	2	92

## Undergraduate Students

## Columbian College

Candidates for A.B. degree.....	228	
Candidates for B.S. in Chemistry degree.....	49	
Candidates for B.S. in Medicine degree.....	4	
Candidate for Master of Diplomacy degree.....	1	
Special.....	189	
Auditors.....	13	484

## College of Engineering

Candidates for B.S. in Arch. degree.....	9	
Candidates for B.S. in C.E. degree.....	38	
Candidates for B.S. in E.E. degree.....	28	
Candidates for B.S. in M.E. degree.....	32	
Special.....	98	205

*Teachers College*

Candidates for A.B. and Teachers' Diploma.....	116	
Candidates for Teacher's Diploma.....	1	
Special.....	10	
Auditors.....	3	130
		<hr/>
		911
Duplicates.....		7
		<hr/>
		904

## PROFESSIONAL DEPARTMENTS

## LAW SCHOOL

Students who are college graduates are indicated by the degree, year in which it was received and name of the college conferring it.

Students who have had only part of a college course in addition to the necessary preparatory education are indicated by the names of the colleges attended.

## First Year

- Alexander, Walter Richardson; Missouri... 1110 Rhode Island Avenue  
University of Missouri.
- Allen, James Thatcher; District of Columbia..... 1833 U Street
- Atherton, Wallace Irving; Washington..... 1100 Vermont Avenue  
University of Pennsylvania.
- Baker, Lawrence Adams; District of Columbia,  
3141 Highland Avenue, Cleveland Park  
A.B., 1913, Princeton University.
- Bardwell, Halsey Warren; Vermont..... Apartment 601, The Alabama  
Ph.B., 1910, Ewing College.
- Barrett, Samuel Melton; District of Columbia.. 1304 Fairmont Street  
The George Washington University.
- \*Bates, Lloyd Graham; Pennsylvania..... 1741 G Street
- Batt, Joseph Harper; Delaware..... The Landmore  
The George Washington University.
- Baxter, Chester C.; Ohio..... 1815 Lamont Street  
S.B., 1908, Ohio Northern University.
- Beadle, John Bookwalter; District of Columbia..... 312 A Street S.E.  
The George Washington University.
- Berkeley, Norborne; Virginia... Episcopal High School, Alexander, Va.  
University of Virginia.
- Bird, Branch; Kentucky..... 1101 K Street  
Center College, Kentucky.
- †Boeke, Charles Leslie; Illinois..... 509 Union Trust Building
- \*Boyle, Francis; New York..... 1829 California Street  
The George Washington University.
- Breuninger, Lewis T; District of Columbia..... 3208 19th Street  
A.B., 1913, Johns Hopkins University.

- Brooks, Grace Elisabeth Platt; Connecticut.....2120 G Street  
Brown, Alvin McCreary; Maryland.....Berwyn, Md.  
The George Washington University.
- Brown, Earle L.; Iowa.....1333 Fairmont Street  
Brown, Harold L.; Iowa.....1333 Fairmont Street  
Brown, Ralph Waldo; District of Columbia.....2626 University Place  
E.M., 1912, Lafayette College.
- Bryant, Niles, Jr.; Illinois.....1100 Vermont Avenue  
Bull, Charles Roy; Maine.....334 Maryland Avenue N.E.  
A.B., 1913, Bowdoin College.
- Burchfield, William Eden; District of Columbia...4429 Georgia Avenue  
Burrows, Tremaine Kellogg; New York.....6902 5th Street  
A.B., 1897, University of Nebraska.
- †Campbell, Max Durham; Maryland.....Woodside, Md.  
Chamberlin, Pierre Audrey; District of Columbia.....1323 M Street  
The George Washington University.
- Chang, Chen Yen; China.....1715 G Street  
Chinese National College, Shanghai.
- Clark, Marion; Maryland.....McKinley Manual Training School  
A.B., 1901; A.M., 1904, Western Maryland University.
- Cornwell, Douglas Van Valkenburg; District of Columbia,  
2140 Wyoming Avenue  
B.S. in Econ., 1913, University of Pennsylvania.
- \*Crozier, Frank H; Illinois.....318 3d Street  
\*Cullum, Clarence S; District of Columbia.....109 Bates Street  
Davis, Joe H; Texas.....708 19th Street  
Deal, Roy Linney; Virginia.....R. F. D. No. 4, Alexandria, Va.  
A.B., 1911, The George Washington University.
- †Desha, John Rollins; Hawaii.....300 2d Street N.E.  
A.B., 1912, Harvard University.
- Desha, Stephen Langhern, Jr.; Hawaii.....283 House Office Building  
Dix, Howard Whedon; New York.....1236 Euclid Street  
M.E., 1911, Cornell University.
- Domer, Harry Tennyson; District of Columbia.....727 15th Street  
A.B., 1900; A.M., 1903, The George Washington University.
- Draeger, Henry Herman; South Dakota.....1025 Vermont Avenue  
\*Earll, Donald Montgomery; Maryland.....Department of Agriculture  
The George Washington University.
- Eudaley, Glenn Robert; Kentucky.....916 15th Street  
\*Everett, John Redden; Minnesota.....Y. M. C. A.  
The George Washington University.
- Farmer, Max D.; District of Columbia.....18 Todd Place N.E.  
B.S., 1910, Michigan Agricultural College.
- Fickas, Melville Philip; Arizona.....1436 M Street  
The George Washington University.
- Fisher, Martin Tucker; District of Columbia...1802 Wyoming Avenue  
B.S., 1913, Harvard University.

- Francis, Marshall H; Ohio.....617 12th Street  
Western Reserve University.
- †Friedland, Karl Benjamin; Utah.....1430 Rhode Island Avenue
- Geekie, George; Massachusetts.....Y. M. C. A.
- †Gray, Eugene Hollister; New York.....4101 Connecticut Avenue  
A.B., 1911, Yale University.
- Gregg, Will Reeves; Texas.....The Cairo  
A.B., 1913, Austin College.
- †Gross, Robert Frank; California.....The Woodward  
Graduate, 1907, United States Naval Academy.
- Haines, Elvans Diehl; District of Columbia.....1340 R Street  
The George Washington University.
- Hamack, Frank Hartmond, Jr.; Minnesota.....Y. M. C. A.
- Hardie, John F., Jr.; New York.....1921 North Capitol Street
- \*Harrington, Katherine; District of Columbia....Conduit Road, D. C.  
B.S., 1906; M.S., 1908, The George Washington University.
- †Hartwig, Harvey Clarence; Wisconsin.....1804 G Street  
University of Wisconsin.
- Hastings, William Riley; Tennessee.....1006 B Street
- †Haymes, Lonnie Slavens; Missouri.....224 3d Street S.E.  
B.Pe., 1913, Springfield, Missouri, State Normal School.
- †Henneman, H. E.; Wisconsin.....1736 G Street
- Hill, Elsie Mary; Connecticut.....The Burlington  
A.B., 1906, Vassar College.
- †Hilliard, Barrymore Nugent; Washington..1226 Massachusetts Avenue  
Leland Stanford University.
- \*Hillje, Harry; Iowa.....925 Westminster Street
- Hodgkins, Howard Wilkinson; District of Columbia.....The Octavia  
B.S. in C.E., 1913, The George Washington University.
- Hollingsworth, Roger P.; District of Columbia.....2815 14th Street
- Hoover, John Edgar; District of Columbia....413 Seward Square S.E.
- Howard, Dudley Blanchard; Dist. of Columbia..314 East Capitol Street
- Huff, John James; Iowa.....1736 G Street  
A.B., 1909, State University of Iowa.
- \*Hulsizer, Robert Inslee; Massachusetts.....1903 N Street  
Massachusetts Institute of Technology.
- Humphrey, Paul N.; Nebraska.....The Roland
- Hunt, Edwin Brendel; District of Columbia.....4318 14th Street
- Hunter, Rosser Lee, Jr.; District of Columbia.....1021 B Street S.E.  
The George Washington University.
- Hutchinson, Lewis Orrin; Connecticut.....604 Gresham Place  
A.B., 1910, Yale University.
- Hyde, Jules Verne; Missouri.....The Dunsmere  
University of Missouri.
- Jackson, Thomas Jefferson; Tennessee.....423 Bond Building  
LL.B., 1911, Cumberland University.
- Jeffries, John M.; District of Columbia...1800 New Hampshire Avenue  
The George Washington University.



- Johnson, Wayne; Montana.....1432 M Street  
University of Montana.
- Johnston, Charles H. L.; District of Columbia, 1219 Connecticut Avenue  
A.B., 1899, Harvard University.
- \*Jones, Millard Ward; Pennsylvania.....The Clermont  
Franklin and Marshall College.
- \*Kay, Clarence Eugene; Arkansas.....Folkstone Courts
- Keith, Raymond Lyles; District of Columbia.....214 8th Street S.E.
- Kent, Henry J.; District of Columbia.....3145 Mt. Pleasant Street  
The George Washington University; Massachusetts Institute of  
Technology.
- Laporte, Ewing Mitchell; Missouri.....U. S. Senate Post Office.
- Larkin, Neil Edwin; South Dakota.....809 13th Street
- Lauck, Lee G.; West Virginia.....1445 Massachusetts Avenue
- Layne, John H.; Illinois.....334 Maryland Avenue N.E.
- Lee, Edward Brooke; Maryland.....Silver Spring, Md.  
Princeton University.
- Lewis, Stuart; Illinois.....325 House Office Building
- Lind, Charles A.; Minnesota.....1420 R Street  
Valparaiso University.
- \*Louis, Hsiao-Min Soulé; China.....2001 19th Street  
A.B., 1912, George Washington University; A.M., 1913, Univer-  
sity of Pennsylvania.
- \*McAvoy, Catherine Agatha; District of Columbia, 1860 Columbia Road  
A.B., 1908, The George Washington University.
- McGuire, Ruby Ridgway; Oklahoma.....2219 California Street  
University of Michigan.
- Major, Archie Moyer; Washington.....1006 Massachusetts Avenue  
A.B., 1913, University of Washington.
- Mann, Earle Elmer; Massachusetts.....1242 11th Street  
S.B., 1909, Worcester Polytechnic Institute.
- Mann, Joseph Ernest; North Carolina.....800 10th Street
- Marcus, M. Manning; Wisconsin.....The Valois  
The George Washington University.
- Marthinson, Detlow Mainch; District of Columbia,  
1788 Columbia Road
- †Merritt, Robert Gwathmey; New York.....Forest Service  
B.F., 1910; F.E., 1913, Biltmore Forest School.
- \*Mitchell, Lennard Harris; District of Columbia.2219 California Street
- Monty, Willis Ellsworth; Vermont.....610 22d Street
- Moon, Arthur Clifton; District of Columbia,  
26 Carroll Avenue, Takoma Park D. C.
- Morehouse, P. B.; District of Columbia.....1526 O Street  
Cornell College, Iowa.
- Morman, Raymond J; Pennsylvania.....929 Rhode Island Avenue
- Morris, Daniel Leigh; District of Columbia.....823 Jefferson Street
- Morrow, Hewey Bascom, Jr.; Tennessee.....128 13th Street N.E.

- Myers, Paul Forest; Pennsylvania.....The Kenyon  
A.B., 1913, Princeton University.
- Neal, Kenneth Stanley; Connecticut.....1769 Columbia Road  
B.S., 1911, Worcester Polytechnic Institute.
- \*Nickerson, Harry Arthur; Maine.....The Hamilton  
A.B., 1913, Rollins College.
- Norris, Rhesa Niles; Pennsylvania.....2121 O Street  
The George Washington University.
- \*O'Harra, Stanford Leland; Ohio.....909 C Street N.E.
- Parks, George Edward; Illinois.....2463 6th Street  
The George Washington University.
- Parsons, Charles Edward; District of Columbia....210 1st Street S.E.  
Dartmouth College.
- Penix, William Roy; Arkansas.....1006 Massachusetts Avenue  
A.B., 1912, University of Arkansas.
- Phillips, Homer; District of Columbia.....3327 18th Street
- \*Platt, Frank Liming; Pennsylvania.....1736 G Street  
University of Pennsylvania.
- Potter, Edward Lee; Virginia.....1313 K Street  
A.B., 1910, Washington and Lee University.
- †Powell, William McCauley, Jr.; Pennsylvania.....325 A Street S.E.  
University of Pennsylvania.
- Pringle, Kenneth G; Illinois.....1432 M Street
- †Reavis, Newton C.; Tennessee.....1903 N Street  
Vanderbilt University.
- Rhoads, Thomas William; Pennsylvania.....717 5th Street N.E.
- Roberts, Iorwerth J.; Pennsylvania.....1218 Spring Road  
The George Washington University.
- Robeson, Alexander C.; District of Columbia.....1859 Monroe Street  
Dartmouth College.
- Semmes, Harry Hodges; District of Columbia.....2208 Q Street  
B.S., 1913, Dartmouth College.
- Shaeffer, Glenn Marion; Kansas.....Y. M. C. A.
- Shaver, Homer Tipton; Oregon.....101 Maryland Avenue N.E.  
A.B., 1913, Pacific University.
- Shields, John Ridley; District of Columbia.....1464 Clifton Street
- Shoemaker, Raymond LeRoy; Maryland.....1402 H Street  
Cornell University.
- Silver, Charles; Maryland.....Patent Office  
B.Chem., 1911, Cornell University.
- Smith, Myron A.; Texas.....289 House Office Building  
A.B., 1913, Austin College.
- \*Spare, Romeyn Andrew; Massachusetts.....Patent Office  
A.B., 1908, Harvard University.
- Springer, Lew Wallace; New Mexico.....The Dresden  
The George Washington University; University of Wisconsin.
- \*Springs, Laertes Pittman; District of Columbia...1945 Calvert Street

- \*Stahl, Benton Mehrling; District of Columbia.....313 12th Street  
D.V.M., 1912, The George Washington University.
- Tavener, Leslie James; New York.....60 M Street
- \*Thistlethwaite, Mark; Indiana.....The Burlington  
Litt.B., 1901, Swarthmore College.
- Thompson, Manly G.; Iowa.....1107 13th Street
- Thornton, Smith Gordon; Louisiana.....447 Senate Office Building  
Louisiana State University; The George Washington University.
- Tibbitts, Russell D.; District of Columbia.....3341 18th Street
- Torgerson, Gustavus Maurice; Alabama.....114 Rhode Island Avenue
- Towner, Archibald Reed; New York.....925 K Street S.E.
- Tyssowski, John; Virginia.....Room 95, Home Life Building  
B.S., 1908, University of California.
- Underwood, Joseph Younglove; District of Columbia.....1421 U Street  
Ogden College, Kentucky.
- Van Schaick, Francis Edward; New York..1417 Massachusetts Avenue
- Van Vleck, Arthur Nye; District of Columbia,  
Washington Loan and Trust Building
- \*Wakefield, Walter Harold; New York.....600 F Street  
The George Washington University.
- †Walter, Jefferson Francis; Virginia.....1737 17th Street  
A.B., 1911, Washington and Lee University.
- †Watson, Robert Clement; District of Columbia.....3301 16th Street  
C.E., 1913, Lehigh University.
- \*Webb, William Claxton; District of Columbia.....1818 Monroe Street
- \*Webster, Hugh; District of Columbia,  
Office of Experiment Department of Agriculture  
B.S. in Agriculture, 1912, Iowa State College.
- Welch, Williams; District of Columbia.....War Department  
Newberry College, S. C.; LL.B.; LL.M.; M.P.L., Georgetown  
University.
- Wiegand, Henry Frank; District of Columbia.....The Woodworth  
B.S. in E.E., 1911; E.E., 1913, The George Washington University.
- Wilkins, Andrew Clifford; Illinois.....1412 Massachusetts Avenue  
State University of Illinois.
- \*Wing, G. Harold Grant; District of Columbia.....2615 Woodley Place
- Winn, Talmadge S.; District of Columbia.....2016 G Street  
A.B., 1907, University of Georgia.
- Winstead, Chauncey Southerland; District of Columbia..1905 Park Road
- †Young, Herbert Russell; Texas.....327 House Office Building  
A.B., 1913, University of Texas.

## Second Year

- Addison, John West; Virginia.....Bureau of Corporations  
A.B., 1905; A.M., 1906, Washington and Lee University.
- Anderson, Samuel Victor; Mississippi.....House Office Building

- Austin, Charles Morrison; Tennessee.....The St. Regis  
Graduate, 1905, U. S. Naval Academy.
- Baldrige, Elbert Baker; Tennessee.....2120 G Street  
A.B., 1905, Asbury College.
- Bartholomew, Don C.; Ohio.....Senate Office Building  
The George Washington University.
- Berend, Max, Jr.; Ohio.....608 A Street N.E.
- Branch, Hilarion Noel; Mexico.....Mexican Embassy
- Bratton, Leslie Emmett; Nebraska.....The Parkwood  
Graduate, 1907, United States Naval Academy.
- Brown, Lee Hoxie; District of Columbia.....2464 Ontario Road  
The George Washington University.
- Burger, Alfred; Virginia.....Patent Office
- Butterwick, Leonard L.; North Dakota.....2821 27th Street
- Church, Kortright; District of Columbia.....1608 20th Street  
A.B., 1912, Yale University.
- \*Cornell, Herbert Watson; Colorado.....1738 F Street  
A.B., 1908, University of Colorado.
- Coryell, William Cornelius; Kentucky.....346 Senate Office Building  
A.B., 1906, Ohio Wesleyan University.
- Crews, Chalsia E.; Missouri.....1913 North Capitol Street
- Finckel, William Henry, Jr.; District of Columbia.....918 F Street  
The George Washington University.
- Frederick, Alfred Hardin; Texas.....1236 Euclid Street
- Griggs, Elmer Vernon; Iowa.....Patent Office  
B.S. in E.E., 1908; B.M.E., 1909, Iowa State College.
- Grover, Charles S.; Indiana.....3816 Newark Street
- †Hatch, Robert Harrison; Massachusetts.....1236 Euclid Street  
A.B., 1911, Dartmouth College.
- Haugen, Lauritz G.; Iowa.....Winston Hotel  
University of Minnesota.
- Haycraft, Everett Fairfield; Texas.....23 Todd Place N.E.
- Healy, Joseph Edward; Virginia.....1903 N Street
- Hill, George Sydney; Massachusetts.....1432 M Street  
The George Washington University.
- Hoffman, Henry B.; District of Columbia.....1120 7th Street N.E.
- James, Joseph Pierson; California.....1504 H Street  
Leland Stanford University.
- Jenks, Clayton Louis; New York.....3020 Macomb Street, Cleveland Park  
A.B., 1906; M.S., 1909, Hamilton College.
- Jensen, Julius Christian; Iowa.....1343 L Street  
State University of Iowa.
- Johnson, Ross Holbrook; District of Columbia.....1804 Belmont Road  
The George Washington University.
- Jones, Shirley Penrose; Utah.....1100 Vermont Avenue
- \*Keats, Harold; District of Columbia.....1810 Kalorama Road  
A.B., 1912, The George Washington University.



- Kelly, William F., Jr.; District of Columbia.....2117 Flagler Place  
The George Washington University.
- Kuntz, Herbert Oscar; Pennsylvania.....2715 13th Street
- LaFollette, Wm. Leroy, Jr.; Washington.....1459 Harvard Street  
State College of Washington.
- \*Lindsay, Alfred Briscoe; District of Columbia...701 Munsey Building  
A.B., 1913, The George Washington University.
- Lyon, John; Virginia.....618 Colorado Building  
University of Virginia.
- McClellan, Edwin North; Pennsylvania.....The Rochambeau  
University of Pennsylvania.
- McFall, John Monteith; South Carolina.....1409 20th Street  
A.B., 1904, College of Charleston; M.A., 1906, Columbia Uni-  
versity.
- Marechal, Greer McInnis; Alabama.....1527 I Street  
A.B., 1908, University of Alabama.
- \*Meagley, George Crandal; District of Columbia.....The Sherman  
A.B., 1911, Yale University.
- Miltenberger, William Fernand; District of Columbia...1738 M Street  
Georgetown College, University of Paris.
- Mozingo, Harley I.; Colorado.....1830 G Street
- \*Mulligan, William Miles; District of Columbia.3104 Mt. Pleasant Street  
The George Washington University.
- Osborn, Clarence C.; South Dakota.....Rosslyn, Va.
- Parmelee, Earle Linsley; Pennsylvania.....1454 Fairmont Street
- Pierce, James Francis; Michigan.....Patent Office  
B.C.E., 1912, University of Michigan.
- Potter, Charles Hollister; North Carolina.....918 F Street  
A.B., 1913, The George Washington University.
- \*Reese, Francis Sydney; Maryland.....606 Y. M. C. A.
- Reinhardt, John Joy; Nebraska.....1717 S Street  
The George Washington University.
- Rogers, George C.; New York.....1755 Lamont Street
- Rogers, James Cunningham; District of Columbia...3546 13th Street  
University of Pittsburg.
- Roper, Daniel Calhoun, Jr.; South Carolina,  
816 Massachusetts Avenue N.E.
- Sanborn, George Allen; Wisconsin.....1318 30th Street  
A.B., 1912, The George Washington University.
- Schenck, Arthur C.; District of Columbia.....514 Kenyon Street
- Schmied, James William; Ohio.....18 Iowa Circle  
B.S., 1910, Ohio Northern University.
- Shaw, Randolph Codman; District of Columbia.....1419 R Street  
Washington and Lee University.
- Shepard, William Wallace; California.....1517 P Street
- Smith, Breedlove; Texas.....289 House Office Building  
A.B., 1912, Austin College.

- Smith, Henry Charles Albert; Ohio.....Y. M. C. A.  
Heidelberg University, Tiffin, Ohio.
- Smith, Robert William; District of Columbia.....1418 Allison Street
- Sprague, Clarence Andrew; District of Columbia,  
1923 Summit Place N.E.  
B.S., 1904, Syracuse University.
- Stanley, Elton Wood; South Dakota.....1767 Church Street  
University of Wisconsin.
- Stevens, Arthur E.; Missouri.....Weather Bureau
- Stewart, Elmer; District of Columbia.....1812 Lamont Street  
B.S. in Chem., 1912, The George Washington University.
- Stoddard, Alfred L.; Iowa.....1709 17th Street  
University of Wisconsin.
- Stone, Jesse Raymond; Wisconsin.....173 Uhland Terrace N.E.  
B.Litt, 1899, University of Wisconsin.
- Thompson, Alfred Wright; District of Columbia...25th and E Streets  
The George Washington University.
- Thurman, Samuel D.; Utah.....Interstate Commerce Commission  
University of Utah.
- Trudgian, Andrew Beers; West Virginia.....603 Columbia Road  
University of Pennsylvania.
- Vaughn, Orville R.; Tennessee.....Y. M. C. A.
- Wadsworth, John Thaddeus; Maine.....1505 Vermont Avenue  
A.B., 1909, Bates College.
- Whitehorn, Homer A.; Nebraska.....1814 Park Road  
A.B., 1908, Nebraska Wesleyan University.
- Wilson, Laurence Norton; Idaho.....1502 Vermont Avenue  
The George Washington University.
- Wright, Clarence Edward; Utah.....1100 Vermont Avenue  
Agricultural College of Utah.
- Wynne, Carl Monroe; Missouri.....Y. M. C. A.  
A.B., 1913, University of Missouri.

### Third Year

- Acker, Harold Knowles; District of Columbia.....913 16th Street
- Anderson, Paul; Illinois.....1735 New Hampshire Avenue
- Baker, Charles Silas; District of Columbia.....Conduit Road, D. C.  
A.B., 1911, Cornell University; A.M., 1912, Columbia University.
- Barr, John Lester; District of Columbia.....The Wyoming  
A.B., 1910, Harvard University.
- Barton, Walter Elbert; Idaho.....1502 Vermont Avenue
- Baumgartner, Edgar Foster; New Jersey.....The Champlain  
M.E. 1911, Lehigh University.
- \*Bickel, Harvey Cleveland; Pennsylvania.....Y. M. C. A.
- Bisson, Louis Alfred; Massachusetts.....3011 Georgia Avenue  
Worcester Polytechnic Institute.

- Black, Henry George Atkinson; Massachusetts,  
636 Rock Creek Church Road  
Massachusetts Institute of Technology.
- Borland, Paul Raymond; Pennsylvania.....1903 N Street  
A.B., 1910, Washington and Jefferson College.
- Clark, Bennett Champ; Missouri.....Congress Hall Hotel  
A.B., 1913, University of Missouri.
- Clark, Merrell Edward; New York.....818 17th Street  
M.E., 1911, Cornell University.
- Cox, John Dee; Texas.....4300 Kansas Avenue  
Southwestern University.
- Crane, Alpheus Jennings; District of Columbia.2930 Thayer Street N.E.  
B.S. in E.E., 1903, Purdue University.
- Creekmore, Thomas Leonidas; Virginia.....1502 Vermont Avenue
- Cumpston, Edward Henry, Jr.; District of Columbia...818 17th Street  
M.E., 1909, Cornell University.
- Elkins, Harry Scott; South Dakota.....1502 Vermont Avenue
- Enlows, Harold Franklin; Illinois.....Office Indian Affairs
- Evans, Budd; Minnesota.....2520 12th Street
- Fitch, William Reed; North Dakota.....Y. M. C. A.  
The George Washington University.
- Fletcher, Frederick Dix; Washington.....Y. M. C. A.
- Fraizer, Cecil C.; Indiana.....1412 Euclid Street  
University of Pennsylvania.
- Freyer, Frank Barrows; District of Columbia.....1929 S Street  
Graduate, United States Naval Academy.
- †Gordon, William Alexander, Jr.; Montana.....3023 Q Street
- Greenberg, Louis; District of Columbia.....612 N Street  
The George Washington University.
- Hall, Bartow Harwood; Colorado.....1821 I Street  
A.B., 1910, Amherst College.
- Hamner, Lunsford Loving; District of Columbia...1855 Calvert Street  
A.B., 1913, University of Virginia.
- Handy, William Upshur; District of Columbia..3312 Highland Avenue
- Hawley, Luther W.; Vermont.....Patent Office  
B.S., 1908, Worcester Polytechnic Institute.
- Howard, Frank Atherton; Illinois.....Patent Office  
B.S. in M.E., 1911, The George Washington University.
- Hubbard, Elliott S.; New York, Superintendent of Documents, G. P. O.
- Johnson, Arthur Chilion; Colorado.....901 20th Street  
University of Colorado.
- Jones, Carl Curtis; Maine.....United States Senate Library
- Jones, Franklin Daniel; Illinois.....Bureau of Corporations  
A B., 1910, State University of Iowa.
- \*Krogstad, Robert Bacon; District of Columbia.....1524 K Street
- McCawley, Harrison Byington; Iowa.....1432 M Street  
A.B., 1910, Drake University.

- Mapes, Carl Anthony; Michigan.....419 District Building  
 Meckley, Robert Byers; Pennsylvania.....1236 Euclid Street  
 B.S. in E.E., 1908, Pennsylvania State College.  
 Morse, Robert Virgil; New York.....818 17th Street  
 M.E., 1911, Cornell University.  
 Oberlin, John Jay; Maryland.....Patent Office  
 A.B., 1901, Washington and Lee University.  
 Oren, James Paul; Pennsylvania.....Bureau of Corporations  
 Read, Raymond Edgar; Massachusetts.....The Melrose  
 Rice, Willis Ballance; New York.....1913 Park Road  
 M.E., 1907, Cornell University.  
 Rose, Claude Custer; Ohio.....115 R Street N.E.  
 M.E., 1905, Ohio State University.  
 Rubenstein, Samuel; New York.....1501 11th Street  
 Sanders, Harold Benthall; Mississippi.....1013 10th Street  
 B.S., 1910, Mississippi Agricultural and Mechanical College.  
 Savage, Henry J.; Michigan.....1227 Girard Street N.E.  
 B.S. in E.E., 1908, University of Michigan.  
 Schaeffer, Harrold Christian; District of Columbia....1825 Riggs Place  
 Schantz, Leroy Christian; Iowa.....Patent Office  
 B.S. in E.E., 1908, Iowa State College.  
 Scheffer, Joseph Walter; Connecticut.....1717 S Street  
 Simpson, Archer Roberts; Connecticut.....1903 N Street  
 A.B., 1911, Yale University.  
 Sinclair, Beverly Kennon; Virginia.....1822 I Street  
 \*Smith, Charles Watson; Pennsylvania.....423 Massachusetts Avenue  
 University of Chicago.  
 Smith, Frank Brown; Maryland, 11 E. Lexington Street, Baltimore, Md.  
 Spahr, Neal Bradford; Tennessee.....942 I Street  
 A.B., 1911, University of Chattanooga.  
 Stafford, Edward; District of Columbia.....1725 Lamont Street  
 A.B., 1911, Dartmouth College.  
 Stevenson, Charles Stanley; Kansas.....180 Uhland Terrace N.E.  
 Symons, Thomas William, Jr.; District of Columbia,  
 1606 New Hampshire Avenue  
 A.B., 1911, Yale University.  
 Tanner, Marion Snow; Utah.....1502 Vermont Avenue  
 A.B., 1911, University of Utah.  
 \*Tolbert, James Ora; Iowa.....Y. M. C. A.  
 Van Wagoner, John D.; Utah.....Y. M. C. A.  
 \*Walker, John Earl; Michigan.....1402 L Street  
 B.S., 1907, Kalamazoo College; B.S., 1907, University of Chicago.  
 Weikert, Edward Wilford; Pennsylvania.....Patent Office  
 Ph.B., 1906, Brown University.  
 Wenderoth, Ernest Ferdinand; New York.....Patent Office  
 B.S. in E.E., 1910, The George Washington University.



- White, Joseph Curtis; Maine.....334 Maryland Avenue N.E.  
A.B., 1911, Bowdoin College.
- Woodman, William Hidden; New Jersey.....1432 M Street  
B.S., 1908, Dartmouth College.
- Woodson, Walter Browne; Virginia.....Navy Department  
Graduate, 1907, United States Naval Academy.
- Wright, Ulysses Wayne; Illinois.....1307 R Street  
A.B., 1911, Illinois College.

## MASTER OF LAWS

- Bower, Frank Albert; New York.....2627 Adams Mill Road  
M.E., 1910, Cornell University; LL.B., 1913, The George Wash-  
ington University.
- Brookes, John St. Clair, Jr.; District of Columbia..1525 Corcoran Street  
A.B., 1907; M.A., 1910; LL.B., 1913, The George Washington  
University.
- Davenport, Lewis Howard; New York.....Department of Agriculture  
LL.B., 1910, The George Washington University.
- †DeAtley, Harry B.; Kentucky.....511 E Street  
LL.B., 1912, State University of Kentucky.
- Denning, William Ira; Georgia.....4127 9th Street  
LL.B., 1913, The George Washington University.
- \*Dow, William John; Missouri.....2020 North Capitol Street  
LL.B., 1913, The George Washington University.
- Gibbon, Charles Hugh; Wisconsin.....The Arkwright  
LL.B., 1913, The George Washington University.
- \*Kause, Arthur John; District of Columbia.218 Post Office Department  
LL.B., 1913, The George Washington University.
- \*Krogstad, Robert Bacon; District of Columbia.....1524 K Street  
Cornell University; LL.B., 1913, The George Washington  
University.
- \*Miyasaki, Motohiko; Japan.....1310 N Street  
LL.B., 1913, University of Southern California.
- \*Phillips, Adon Daniel; District of Columbia.....1419 G Street  
B.S., 1906; LL.B., 1908, The George Washington University.
- Schnare, Lester Llewellyn; Georgia.....The Akron  
LL.B., 1913, The George Washington University.
- Smith, Frank Seymour; District of Columbia.....1631 16th Street  
A.B., 1910, Wesleyan University; LL.B., 1913, The George Wash-  
ington University.
- †Thomas, Julian M.; Utah.....215 Senate Office Building  
LL.B., 1913, University of Utah.
- Zacharias, Robert Mathias; Pennsylvania.....1717 S Street  
A.B., 1907, Franklin and Marshall College; LL.B., 1913, The  
George Washington University.

## SPECIAL STUDENTS

- †Allan, Ernest Anderson; Maine..... Hamilton Hotel
- \*Bechtold, John Meyers; District of Columbia..... 1930 2d Street N.E.
- \*Benson, Charles A.; Georgia..... 341 Bryant Street  
Georgia School of Technology.
- \*Berman, Jacob; Connecticut..... General Land Office  
Ph.B., 1910; C.E., 1912, Yale University.
- Buck, John J.; Idaho..... 1400 K Street
- \*Davis, David Cady; Massachusetts..... 3605 11th Street  
S.B., 1906, Massachusetts Institute of Technology.
- Devine, William J.; Pennsylvania..... 1463 Rhode Island Avenue  
Georgetown College.
- Harter, Eugene Claudius; Ohio..... 923 12th Street  
The George Washington University.
- \*Harvey, Frederick L., Jr.; District of Columbia. 2146 Florida Avenue
- Hemrich, Ernest Edward; Washington..... 1100 Vermont Avenue
- \*Hill, Ralph Waldo Snowden; District of Columbia... 1113 16th Street  
LL.B., 1909, University of Virginia.
- Hodges, Graham Brooke; District of Columbia..... 1343 Euclid Street
- Humphreys, William Yerger; Mississippi..... House Document Room
- †Jackson, John Ellert; Texas..... 712 20th Street
- Kern, Charles Everett; District of Columbia..... 1406 G Street
- \*Kimball, Henry Frankland; District of Columbia... 4324 14th Street
- King, Harold Compton; District of Columbia..... 3030 O Street
- \*Landon, Chauncey Louis; District of Columbia..... 1432 M Street
- Low, Theodore Henry; Connecticut..... 1627 I Street
- \*McCoy, William Mitchell; District of Columbia.... The Woodworth
- Maxwell, Harry; Oklahoma..... 23 1st Street N.E.
- Milburn, John R.; Maryland..... Patent Office  
B.S., 1906, Dickinson College; LL.B., 1912, Georgetown University.
- \*Muhleman, Albert Kenton; District of Columbia..... 713 14th Street  
The George Washington University.
- \*Nielson, Joseph N.; Illinois..... 1615 Florida Avenue  
B.S. in Arch., 1911, The George Washington University.
- Pilcher, Dalton Jefferson; District of Columbia..... 216 G Street N.E.
- Reavis, Andrew B.; Tennessee..... 1502 Vermont Avenue  
A.B., 1912, The George Washington University; LL.B., 1911,  
National University.
- †Roberts, Howard Payne; District of Columbia... 413 4th Street N.E.  
LL.B., 1913, Georgetown University.
- \*Ruth, Charles Frederick; District of Columbia,  
1709 New Hampshire Avenue
- †Ryan, James A.; Minnesota..... Y. M. C. A.
- Saddler, Clarence Theodore; Nevada..... 156 House Office Building
- Schofield, Joseph King; District of Columbia..... 1844 Park Road

Shawn, Franklin Denwood; Pennsylvania.....	235 War Department
Siegfried, Alvin; South Dakota.....	18 Iowa Circle
†Soule, Grant W.; Idaho.....	Y. M. C. A.
University of Utah.	
Stuart, G. Forrest; Idaho.....	1502 Vermont Avenue
*Truxton, Paul Probasco; District of Columbia.....	1742 S Street
Van Kirk, Lloyd H.; District of Columbia.....	1854 Ingleside Terrace
The George Washington University.	
Veach, Robert Spangler; Virginia.....	415 4th Street
Willis, George Bullock; Virginia.....	Route No. 3, Alexandria, Va.
Winkelhaus, William August; Illinois.....	4126 8th Street
Woolley, Arthur; Utah.....	No. 2, The Riggs, 1409 15th Street
Zernia, Edward; Illinois.....	1 Girard Street N.E.

## AUDITORS

†Munden, Ralph; Pennsylvania.....	Patent Office
M.E., 1906, Cornell University; LL.B., 1913, The George Wash-	
ington University.	
†Straw, Charles Alonzo, Jr.; Massachusetts.....	3014 Dent Place
A.B., 1901, Harvard University; LL.B., 1913, George Washing-	
ton University.	

## SUMMARY

## Candidates for LL.B. Degree.

First year.....	154
Second year.....	75
Third year.....	68
Total.....	297
Candidates for LL.M. Degree.....	15
Special.....	42
Auditors.....	2
	<hr/> 356
Duplicate.....	1
Total.....	<hr/> 355
Candidates for degrees.....	311
Candidates for degrees who are college graduates.....	113
Percentage.....	36.33
Candidates for degrees who have had all or part of a college course..	191
Percentage.....	61.41

## COLLEGE GRADUATES, CANDIDATES FOR DEGREES

Alabama, University of.....	1	Nebraska, University of.....	1
Amherst College.....	1	Nebraska Wesleyan Univer-	
Arkansas, University of.....	1	sity.....	1
Asbury College.....	1	Ohio Northern University....	2
Austin College.....	3	Ohio State University.....	1
Bates College.....	1	Ohio Wesleyan University....	1
Biltmore Forest School.....	1	Pacific University.....	1
Bowdoin College.....	2	Pennsylvania, University of..	2
Brown University.....	1	Pennsylvania State College..	1
California, University of....	1	Princeton University.....	2
Charleston, College of.....	1	Purdue University.....	1
Chattanooga, University of .	1	Rollins College.....	1
Chicago, University of.....	1	Swarthmore College.....	1
Colorado, University of.....	1	Syracuse University.....	1
Columbia University.....	2	Texas, University of.....	1
Cornell University.....	8	Utah, University of.....	1
Dartmouth College.....	4	U. S. Naval Academy.....	5
Drake University.....	1	Vassar College.....	1
Ewing College.....	1	Virginia, University of.....	1
Franklin & Marshall College.	1	Washington, University of...	1
George Washington Univer-		Washington & Jefferson Col-	
sity.....	16	lege.....	1
Georgia, University of.....	1	Washington & Lee Univer-	
Hamilton College.....	1	sity.....	4
Harvard University.....	5	Wesleyan University.....	1
Illinois College.....	1	Western Maryland Univer-	
Iowa, State University of....	2	sity.....	1
Iowa State College.....	3	Wisconsin, University of.....	1
Johns Hopkins University....	1	Worcester Polytechnic Insti-	
Kalamazoo College.....	1	tute.....	3
Lafayette College.....	1	Yale University.....	6
Lehigh University.....	2		
Michigan, University of.....	2		117
Michigan Agricultural Col-		Counted twice.....	4
lege.....	1		
Mississippi Agricultural and		Total.....	113
Mechanical College.....	1	Candidates for degrees.....	309
Missouri, University of.....	2	Percentage.....	36.56



MEDICAL SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF MEDICINE

First Year

Bailey, Marion Prentiss; South Carolina.....	601 M Street
Barrett, Charles Porter, Jr.; District of Columbia.....	1217 K Street
*Blank, Nathan; New York	
Bolton, Boyce Richardson, District of Columbia.....	1319 Q Street
Brian, Victor McMurry; Illinois.....	1209 L Street
Brothers, Ralph Steel; Indiana.....	630 Gresham Place
Cafritz, Edward Alexander; District of Columbia.....	315 Q Street
Cobham, James Lyons; New York.....	1314 I Street
Collins, George Aloysius; Pennsylvania.....	1215 K Street
Connor, Jack Anthony; District of Columbia.....	2227 F Street
Cortés, Manuel Quintana; Porto Rico.....	24 Grant Place
Davis, Ralph Harold; New York.....	1335 H Street
Dickerson, Ghio Dorrell; Virginia.....	916 R Street
Dowling, George Brackett; District of Columbia.....	3603 14th Street
*Duvall, Russell Lee; District of Columbia.....	621 A Street N.E.
Elmore, Henry Gibson; District of Columbia.....	1335 H Street
Fadeley, James McNelledge; Virginia.....	Falls Church, Va.
Ferguson, William Murray; Rhode Island.....	1313 K Street
Frischkorn, Charles Rock; Pennsylvania.....	1242 Newton Street N.E.
Gill, William Tignor, Jr.; District of Columbia.....	442 M Street
Groesbeck, Bertram, Jr.; District of Columbia.....	1824 S Street
*Harris, W. G.; Virginia	
Hartley, Gilbert Vernon; District of Columbia.....	611 E Street S.E.
Hayn, Julius John Frederick; New York.....	1209 L Street
Hecht, David; New York.....	208 D Street
Henderson, Robert Edgar; District of Columbia..	1405 Delafield Place
Herschman, Myer Jerome; District of Columbia.....	2733 P Street
*Hewett, Robert Raymond; Massachusetts	
Hines, Clifford Gentner; District of Columbia....	1512 Columbia Road
Houghton, James Edwin; Pennsylvania.....	1102 14th Street
†Hourwich, Nicholas I.; New York.....	1206 N Street
Jaffe, Leon; New York.....	2120 H Street
Keighley, John Frederick Marshall; Rhode Island.....	1313 K. Street
D.D.S. 1912, University of Maryland.	
Kennedy, Glen Marion; California.....	1435 9th Street
Klein, Kart Karl; New York.....	1209 L. Street
Kotz, Jacob; Russia.....	1005 6th Street, N.E.
Lecker, Frank; New York.....	1435 9th Street
Legge, Kenneth Dartmouth; District of Columbia..	214 A Street, S.E.
Little, John Frank, Jr.; Georgia.....	131 A Street, N.E.
*McChesney, Frank Marks; New York.....	129 Randolph Place
McDowell, John Stafford; New York.....	1214 12th Street
Mann, Jesse Thomas; District of Columbia.....	611 8th St., N.E.

Manning, Wilbur Oscar; Pennsylvania.....22 2nd Street, N.E.  
 Manus, Harry Martin; New York.....2120 H Street  
 Mason, Lyle Millan; Virginia.....308 B Street, N.E.  
 Miller, Robert Bartle; District of Columbia.....1320 10th Street  
 Miller, William Campbell; District of Columbia...Takoma Park, D. C.  
 Montgomery, Howard Howlett; Maryland,

R. F. D. No. 1, Silver Springs, Md.

Mueller, Louis Eugene, R. N.; Wisconsin.....518 H Street, Apt. 43  
 Mulligan, Edward William; Rhode Island.....1101 L Street  
 Murphy, Edward Aloysius; New Jersey.....1215 K Street  
 Myers, Robert Lindsey; Virginia.....111½ N. Pitt St., Alexandria, Va.  
 Northrup, Lewis V., Jr.; New York.....610 L Street, N.E.  
 Oden, Axel Robert; Sweden.....1730 M Street  
 Otis, Fessenden Newport; Connecticut.....1217 K Street  
 Otis, Israel Sabine; Connecticut.....1217 K Street  
 \*Patton, George Ernest; Tennessee.

\*Persons, Thomas George; Colorado.....215 S Street  
 Powell, William Henry; Virginia.....1517 P Street  
 Rawson, George Henry; Massachusetts.....1618 H Street  
 Recca, Albert; New York.....1115 17th Street  
 Reel, George H., Jr.; New Jersey.....1141 12th Street  
 Satterlee, Richard Covert; Illinois.....518 H Street, Apt. 43  
 Schoenfeld, Herbert Hermann, District of Columbia,

3448 34th Place, Cleveland Park

Shinn, Herbert Linville; District of Columbia....145 11th Street N.E.  
 Snider, Ivan; Oklahoma.....1217 K Street  
 Speidel, Francis George; District of Columbia.....2309 1st Street  
 Staknievick, John Henry; District of Columbia....3479 Holmead Place  
 \*Stille, Everett Sherman; Maryland,

1418 Harlem Avenue, Baltimore, Md.

Stone, Raymond Rodeffer; Virginia.....812 B Street N.E.  
 Storch, Raymond Bernard; District of Columbia...142 E Street N.E.  
 Sullivan, Earle Eugene; New York.....1335 H Street  
 Thompson, Ralph Mortimere; Virginia.....1409 L Street

Ph.G., 1910, University College of Medicine, Richmond, Va.

\*Trachtenberg, Benjamin; New York

Villamil, Jose Rosado; Porto Rico.....24 Grant Place  
 Weaver, Clarence Easterly; District of Columbia..131 11th Street N.E.

#### Second Year

Andrews, John Nevins; Maryland,

116 Willow Avenue, Takoma Park, D. C.

Bergeron, George Gernon; Massachusetts...1403 Rhode Island Avenue  
 Brin, Carlos Nicolas; Panama.....1412 Massachusetts Avenue  
 Catzva, Morris; Russia.....235 F Street N.E.  
 Chadwick, Everell V.; Pennsylvania.....1734 Corcoran Street  
 Chamberlin, Frank Tenny; District of Columbia.....1323 M Street

- Collins, Robert Hugh; Virginia.....Fort Myer Heights, Va.  
 Conaway, Austin Ottis; West Virginia.....134 11th Street S.E.  
 Coolidge, Leroy Elmer; Pennsylvania,  
     43, Claiborne Apartment, 6th and H Streets  
 Cousins, Sidney Charles; District of Columbia.....550 14th Street S.E.  
 Craig, Ernest A.; Illinois.....43 The Claiborne  
 Cushing, Eleanore Scholl; Illinois.....2003 H Street  
 DeBeck, Calvin Morgan; Illinois.....1215 K Street  
 Figueras, Jaime Julian; Porto Rico.....1223 K Street  
 \*Fitzhugh, Clark Seal; District of Columbia.....124 12th Street S.E.  
 Folsom, John Eugene; District of Columbia.....515 F Street  
 \*Garnsey, Orace Betts; Massachusetts.....1314 I Street  
 Gordon, Robert John; Wisconsin.....811 10th Street  
 Grayson, Stewart Maxwell; Virginia.....Vienna, Va.  
 Guilhempe, Nemorin; France.....Box 2201, Station G  
 Haskell, Roy T.; District of Columbia.....808 New Jersey Avenue  
 Heffernan, John Francis; Ohio.....1215 K Street  
 Hirschoff, Jr., Ernest A.; New Jersey.....1403 Rhode Island Avenue  
 Huddleston, Jarrett Matthew; District of Columbia....2504 Hall Place  
 Ladd, John Morriss; Virginia.....134 11th Street S.E.  
 Lynch, Joseph Aloysius; New York.....1214 12th Street  
 McCanna, Louis E.; New York.....1215 K Street  
 Macon, Edward Bailey; District of Columbia.....1123 13th Street  
     Phar.D., 1912, State College, Angola, Indiana.  
 Norton, William Harrison; District of Columbia,  
     Apartment 4, The Ashburn, 1300 Harvard Street  
     Phar.D., 1912, George Washington University.  
 Peters, David B.; Virginia.....Tuberculosis Hospital  
     Phar.D., 1910, George Washington University.  
 Powers, Richard Thomas; New York.....43 Claiborne Apartment  
 Quirk, Jerome Thurston; Virginia.....1100 Vermont Avenue  
 Reuter, Fritz A.; District of Columbia.....1337 Park Road  
 Rice, Eugene Clarence, Jr.; District of Columbia.....4832 16th Street  
 Rivera, Pedro A.; Porto Rico.....24 Grant Place  
 Rivera, Rafael A.; Porto Rico.....24 Grant Place  
 Rosenberg, Louis Charles; Connecticut.....936 K Street  
 Ryan, Frank Kevan; New York.....1214 12th Street  
 Simpson, Raymond Cornwell; District of Columbia,  
     123 Maryland Avenue, N.E.  
 Stachniewicz, Vincent Joseph; District of Columbia....1530 30th Street  
 Stratton, Ernest Kenneth; New Jersey.....3121 14th Street  
     P.D., 1910, Philadelphia College of Pharmacy.  
 Taylor, Sterling Price, Jr.; District of Columbia,  
     1240 Pennsylvania Avenue, S.E.  
 Thompson, Richard Knight; District of Columbia,  
     484 Maryland Avenue, S.W.  
 Thyson, Leo Cromwell; District of Columbia.....1366 Columbia Road  
     Phar.D., 1912, George Washington University.



Tilton, Joel Adams, Jr.; District of Columbia.....	1520 29th Street
Walton, Robert Ralph; Washington.....	1123 13th Street
White, Paul A.; Michigan.....	37 V Street N.E.
S.B., 1908, Simpson College; Ph.B., 1908, Chicago University.	
Yarnall, Audra Hopkins; Pennsylvania.....	1734 Corcoran Street

### Third Year

Atkinson, Francis Vernon; New York.....	23 Iowa Circle
Ball, William Edward; New York.....	1326 11th Street
Bingman, Carroll Edward; Pennsylvania.....	617 Morris Street N.E.
Blake, Benjamin Charles; Louisiana.....	1113 11th Street
Bost, Thomas Creasy; North Carolina.....	1002 11th Street
Bradley, Jeter Carroll; North Carolina.....	1002 11th Street
Carr, Earl B.; California.....	43 Claiborne Apartment
Collins, James H.; Maine.....	Washington Asylum Hospital
A.B., 1907, Bowdoin College.	
Dean, Floyd Chapin; New York.....	43 Claiborne Apartment
DeLuca, Horatio Roger; New Jersey.....	1002 11th Street
Donn, Frederick Y.; District of Columbia....	1544 New Jersey Avenue
Phar.D., 1904, National College of Pharmacy; Ph.C., 1908, Medical-Chirurgical College of Pharmacy.	
Field, Fay X.; Pennsylvania.....	Casualty Hospital
Gentzkow, Cleon Joseph; Minnesota.....	Garfield Hospital
Green, Eric Steel; New York.....	1009 13th Street
Kenner, Albert Walton; District of Columbia.....	1711 17th Street
Phar.D., 1910, George Washington University.	
Lippitt, Samuel Herman; New York,	
Room 507, Union Savings Bank Building	
McCray, Arthur Howard; Ohio.....	1100 Vermont Avenue
S.B., 1909, Ohio State University; D.V.M., 1911, George Washington University.	
Moreno, Joseph DeRoulhac; Florida.....	Emergency Hospital
Moser, Harry Newton; Pennsylvania.....	1734 Corcoran Street
Passer, William F.; Minnesota.....	Children's Hospital
Ph.C., 1904, University of Minnesota.	
Pullen, George W., Jr.; New York.....	1214 12th Street
Putzki, Paul Stirling; District of Columbia....	1862 California Street
Rowlson, Ira Alonzo; New York.....	1214 12th Street
Shilen, Joseph; New York.....	1209 L Street
Williams, V. Blackstone; District of Columbia.....	1605 30th Street
Woodward, Roy B.; New York.....	Sibley Hospital
Zeagler, Allen Grover; Louisiana.....	1214 12th Street

### Fourth Year

Aston, Melville Joseph; Pennsylvania.....	1909 G Street
Barger, Gervase James P.; Nebraska.....	2224 Decatur Place
Bloom, Rudolph; Virginia.....	1105 K Street



Brown, Edward Allan, 2nd; New York.....	1105 K Street
Chipman, Henry Edgar Harrison; Canada.....	1808 I Street
Eisenberg, Joseph Johns, Wisconsin.....	1124 12th Street
Ph.G., 1910, Marquette University.	
English, Leonard Harrison; New York.....	1214 12th Street
M.D., 1913, George Washington University.	
English, Merton Alden; District of Columbia.....	1758 Park Road
Hardstaff, Roy John; Australia.....	1322 Vermont Avenue
Harrison, Forrest Martin; Virginia.....	818 A Street S.E.
Jones, Floyd Burton; Canada.....	Apartment 43, The Claiborne
Jova, Andrew Martin; Cuba.....	811 10th Street
Lonsdorf, Jacob John, Jr.; Pennsylvania.....	1909 G Street
Miller, Thomas, Jr.; District of Columbia.....	1616 7th Street
Shea, George Marvin Waite; Connecticut.....	3210 19th Street
Sherwood, Moriss Waldmar; Wisconsin.....	1124 12th Street
Supplee, Eugene Deyerle; Virginia.....	311 A Street N.E.
Sze, Tsannyoen Philip; China.....	2750 14th Street
Taylor, Chase; District of Columbia.....	1433 Belmont Street
VanOrnam, Vilas George; New York.....	1322 Vermont Avenue

## SPECIAL

Bogan, Isabel Katherine; District of Columbia....	246 8th Street N.E.
M.D., 1910, Woman's Medical College of Pennsylvania.	
Holland, John D.; Maryland.....	645 5th Street N.E.
Law, Henry Gordon; District of Columbia.....	1519 E Street S.E.
Nelson, Nesmith P.; Minnesota.....	23 Rhode Island Avenue
M.D., 1910, George Washington University.	

## SUMMARY

First year.....	76
Second year.....	48
Third year.....	27
Fourth year.....	20
Special.....	4
	<hr/> 175

## DENTAL SCHOOL

## CANDIDATES FOR THE DEGREE OF DOCTOR OF DENTAL SURGERY

## First Year

*Adams, Albert Chester; Maryland.....	College Park, Md.
Aspinall, Charles Pindall; West Virginia.....	1418 Meridian Street
*Brill, Nathan P.; District of Columbia.....	1457 Corcoran Street
*Bryan, Arthur Melven; District of Columbia.....	Naval Hospital
Burgess, Eric Hjalmar; Rhode Island.....	828 12th Street
*Burke, James; England.....	211 1st Street N.E.
†Butkiewicz, Eugenia; District of Columbia.....	312 G Street
Butkiewicz, John K.; District of Columbia.....	312 G Street N.E.

*Carter, Frank A.; District of Columbia	1310 L Street
Claytor, Spry Owen; Ohio	1504 Columbia Road
Cohen, Irwin Bertram; District of Columbia	1812 9th Street
Cohen, Maurice Harvey; Alabama	1812 9th Street
Cole, John Burns; Missouri	1615 Swan Street
Davis, Bernard M.; Maryland	3019 O Street
Diehl, Harry Oliver; Pennsylvania	48 H Street N.E.
Evansha, John Frank; Pennsylvania	1125 14th Street
Frazier, George Mortimer; District of Columbia,	
Nichols Avenue, Congress Heights	
Gilman, Harry K.; Hawaii	300 2d Street N.E.
*Greenberg, Joseph; New York	511 K Street N.E.
Griffith, Olin Newton; District of Columbia	509 11th Street
†Heald, Alfred Daniel; Massachusetts	132 East Capitol Street
Herring, Paul Supplee; Maryland	Hyattsville, Md.
Hise, Harley; California	314 East Capitol Street
Hodges, Bower; District of Columbia	306 Randolph Place N.E.
*Johnston, Patterson Bayne; Virginia	314 Indiana Avenue
Johnston, Paul Edward; Virginia	Leesburg, Va.
*Jones, Robert J.; Wisconsin	2 6th Street N.E.
*Keroes, William; District of Columbia	917 G Street
McCullough, Robert Campbell; Illinois	1751 Columbia Road
Moore, Clarence Robert; Virginia	1418 Meridian Street
Morgan, John Edward; District of Columbia	1334 G Street S.E.
Porter, Frank Gamewell; Iowa	620 Maryland Avenue N.E.
Shadrick, John H.; Maryland	1115 K Street
Smith, Walter Scott; Virginia	R. F. D. No. 2, Alexandria, Va.
Stein, Edwin Leroy; Washington	222 3d Street S.E.
Stutzman, William Ernest; District of Columbia	3533 Warder Street
Sweet, William Manly; District of Columbia	41 R Street N.E.
Willard, Albert William; Maine	706 20th Street
Wilson, Myron Webster; District of Columbia	58 M Street
Wolf, May; District of Columbia	235 W Street

#### Second Year

Brower, Delmer Davis; Virginia	704 K Street N.E.
Browne, Wilmer Mrs.; New York	1621 13th Street
Carr, Josiah Lawrence; Texas	1313 14th Street
Dimas, Blanca; Porto Rico	817 12th Street
Frazier, Griffin Guy; District of Columbia	11 Grant Place
Friedman, Joseph Altshuler; District of Columbia	1416 9th Street
Hall, Arthur Ruebun; District of Columbia	1300 Maryland Avenue N.E.
Hogan, Arnold Wilbur; District of Columbia	933 G Street
Lewis, Ellis Smith; Virginia	Box 21, Ballston, Va.
McNally, Benjamin Raymond; Rhode Island	1125 14th Street
Minkin, Golda; District of Columbia	412 P Street
Palkin, Joseph Ralph; Connecticut	1215 I Street

Sandberg, Adolph; District of Columbia.....	1402 14th Street
Sampsell, Thomas L.; District of Columbia.....	1125 14th Street
Schmidt, Carl Heisler; Massachusetts.....	1106 Vermont Avenue
Slack, Edward Markorn; District of Columbia.....	417 6th Street
Thompson, James Gray; District of Columbia.....	1207 East Capitol Street
Thompson, Richard K.; District of Columbia.....	484 Maryland Avenue S.W.
Tilley, Edwin Ross; District of Columbia.....	3510 10th Street
Wagner, Lawrence Reginald; New York.....	The Lurgan
White, Douglas Alfred; Massachusetts.....	1913 Pennsylvania Avenue
Wresinski, Leo J.; Illinois.....	2313 Washington Circle

## Third Year

Achsan, Samuel Charles; New York.....	338 C Street
Beebe, Ira Dow; Connecticut.....	1020 9th Street
Bonseigneur, Camille Robespierre; France.....	411 11th Street S.E.
Callar, Donald; Pennsylvania.....	828 12th Street
Danemann, Samuel; Russia.....	338 C Street
Fansler, Orville Newton; Nebraska.....	Bethesda, Md.
Forbes, William Edward; New York.....	1861 Newton Street
Ginsberg, Samuel Benjamin; District of Columbia.....	200 5th Street S.E.
Golden, Edward Earl; Wyoming.....	1720 Newton Street
Guilhempe, Nemorin; France.....	2201 Station G
Hagen, Walter Lowell; New York.....	501 2d Street N.E.
Haywood, Markley Roland; New York.....	1221 East Capitol Street
Mead, Sterling Vernon; Kansas.....	1101 Monroe Street
Pietrosiak, Joseph L.; Maryland.....	928 New York Avenue
Prendergast, Benjamin Frank; District of Columbia.....	465 G Street
Roberts, Jasper Newton; Tennessee.....	608 13th Street
*Smith, Jesse K.; Virginia.....	The Lenmass, Apartment 301
Walls, Harry Ernest; Georgia.....	1234 I Street

## SUMMARY

First year.....	40
Second year.....	22
Third year.....	18
	<hr/> 80

## NATIONAL COLLEGE OF PHARMACY

## CANDIDATES FOR THE DEGREE OF DOCTOR OF PHARMACY

## Freshmen

Blue, Norman R.; District of Columbia.....	1855 Lamont Street
Colahan, John T.; Maryland.....	Rochville, Md.
B.T., 1902, St. Mary's Seminary, Baltimore, Maryland.	
Davis, George A.; District of Columbia.....	Kensington, Md.
Davis, Louie G.; Virginia.....	Alexandria, Va.
Davis, Paul R.; Pennsylvania.....	11½ Grant Place

Dudley, James W.; District of Columbia.....Takoma, D. C.  
 Fegan, Francis E.; District of Columbia.....493 H Street S.W.  
 Foster, Allen, Jr.; District of Columbia.....1505 Rosedale Street N.E.  
 Frailey, William F.; Maryland.....The Sherman  
 Gaines, John Marshall; Virginia. 114 N. Alfred Street, Alexandria, Va.  
 Hemp, Harry; Virginia.....Cherrydale, Va.  
 Holmes, Kate S.; Ohio.....1337 Kenyon Street  
 Johnson, P. Marshall; Virginia...120 S. Henry Street, Alexandria, Va.  
 Kiefer, Ralph S.; Pennsylvania.....6907 6th Street  
 Leon, Manuel B.; Cuba.....318 3d Street  
 McArthur, John E.; Kansas.....19th and Benning Road N.E.  
 McKennon, Emory F.; Ohio.....1330 North Capitol Street  
 Minnick, George V.; Pennsylvania.....300 11th Street S.E.  
 Payewski, Peter J.; Russia.....603 I Street  
 Painter, Archie C.; District of Columbia.....501 6th Street N.E.  
 Paylor, Russel S.; North Carolina.....803 A Street S.E.  
 Picot, Seaboro C.; North Carolina.....946 Virginia Avenue S.W.  
 Stewart, William A. T.; Idaho.....1407 Rhode Island Avenue

#### Juniors

Adams, William S.; District of Columbia.....713 16th Street N.E.  
 Arnold, Howard L.; Virginia...222 N. Patrick Street, Alexandria, Va.  
 Biggins, James J.; District of Columbia.....1328 31st Street  
 Borland, Anna May; Michigan.....The New Berne  
 Brown, Andrew J.; North Carolina.....619 East Capitol Street  
 A.B., 1912, Roanoke College.  
 Donahue, T. Francis; District of Columbia.....3345 P Street  
 Goldstein, Morris G.; Russia.....617 P Street  
 Kenner, Harvey R.; District of Columbia.....1711 17th Street  
 Kerfoot, Garland S.; Virginia.....69 W Street  
 Lawson, James H.; North Carolina.....815 C Street N.E.  
 Lear, Israel; Russia.....1253 9th Street  
 McCambridge, Joseph A.; District of Columbia.....2144 F Street  
 Malone, William W.; District of Columbia.....701 8th Street S.E.  
 Minkin, Abraham J.; Russia.....1501 1st Street  
 Modena, Ervin; Virginia.....703 15th Street  
 Norris, Earl M.; Maryland.....130 Randolph Street  
 Tibbets, Lyman B.; District of Columbia.....1636 17th Street  
 Vestal, Paul W.; North Carolina.....7th and Massachusetts Avenue  
 Wedding, William C.; District of Columbia.....18 6th Street N.E.  
 Williams, Clyde G.; Pennsylvania.....1014 Pennsylvania Avenue S.E.

#### Seniors

Biggs, John Gregory; District of Columbia.....621 Irving Street  
 Blackistone, Beulah Lanette; California.....1538 8th Street  
 Burgher, Vincent Alois; New Jersey.....1304 Park Road  
 Carroll, John Mortimer; District of Columbia.....1430 V Street



Crisp, Thomas Benton Jr.; District of Columbia.....	638 E Street N.E.
Day, Harold Lewis; District of Columbia.....	1241 Euclid Street
Donohoe, Walter Joseph Andrew; New York.....	1808 1st Street
Dudley, Frederick Edwin Jr.; District of Columbia..	Takoma Park, D. C.
Fink, James Albert; District of Columbia.....	1826 15th Street
Hall, Earle Richardson; Iowa.....	923 Rhode Island Avenue
Heller, Theodore John; District of Columbia.....	740 7th Street S.E.
Kimball, Clarence Victor; North Carolina.....	1850 Park Road
Kloczewski, Albert Marian; District of Columbia.....	701 5th Street
Koss, Edward Flavelle; District of Columbia.....	1814 Calvert Street
Lantz, Samuel Aaron; Virginia.....	520 3d Street
Moose, George Kelley; North Carolina.....	1753 Kilbourne Street
Murphy, John Allen; Pennsylvania.....	225 East Capitol Street
LL.B., 1909, Georgetown University.	

Ros, Carlos Manuel; Panama.....	1320 12th Street
Rosenberg, Louis Charles; Connecticut.....	931 New York Avenue
Stephens, William Andrew; Kentucky.....	1811 Kalorama Road
Umhau, John William; District of Columbia.....	737 10th Street S.E.
Waldman, Jacob; Russia.....	232 Tennessee Avenue N.E.
Weil, Albert; Virginia.....	Alexandria, Va.

## SPECIAL

Doran, James M; North Dakota.....	2914 11th Street
S.B., University of Minnesota.	
Fitzgerald, F. F.; District of Columbia.....	15th and H Streets
Linder, William Vanarsdale; Indiana.....	Bureau of Internal Revenue
A.M., 1907, Ohio State University.	
Miller, Henry M.; Kentucky.....	25th and E Streets
S.B., 1909, Hanover College.	

## SUMMARY

Freshman.....	23
Junior.....	20
Senior.....	23
Special.....	4
	<hr/>
	70

## COLLEGE OF VETERINARY MEDICINE

## CANDIDATES FOR THE DEGREE OF DOCTOR OF VETERINARY MEDICINE

## Freshmen

Glover, George Stennett; England.....	634 Pennsylvania Avenue N.E.
Horbett, John Edward; New York.....	933 M Street
Lawych, Louis; New York.....	531 Gresham Place
Lewis, Ralph Henry; District of Columbia.....	Riverdale, Md.
Nelson, Byron C.; Wisconsin.....	2240 Cathedral Avenue
Patterson, Jr., James; Virginia..	1010 Cameron Street, Alexandria, Va.

Savage, Howard Mayo; Illinois.....	1117 Vermont Avenue
Woodson, Charles Edward; Virginia.....	3020 Dent Place
Wright, William H.; Ohio.....	933 M Street

**Juniors**

Biondi, Harry J.; District of Columbia.....	508 7th Street S.E.
Brown, Herbert H.; Missouri.....	The Alabama
Buffin, Kenneth E.; Maryland.....	Chevy Chase Lake, Md.
Grubb, William Hugh; Virginia.....	1412 Belmont Street
Lynn, William M.; North Carolina.....	201 I Street
Rippon, Charles W.; Pennsylvania.....	1412 Belmont Street
Sipos, Andrew J.; Virginia.....	2115 14th Street
Skippon, Charles D.; Pennsylvania.....	208 1st Street
Thigpen, Claude; Alabama.....	1215 Euclid Street
Wilcox, Floyd P.; New York.....	1011 M Street

**Seniors**

Cashell, Irving Magruder; Maryland.....	2907 Sherman Avenue
Chamberlain, Joseph F.; District of Columbia.....	31 R Street N.E.
Chapin, Judson Kerfoot; Virginia.....	1870 Monroe Street
Colflesh, Joseph Harmon; Pennsylvania.....	1412 Vermont Street
Cook, Parley Merle; Ohio.....	1712 15th Street
Craig, Norman C.; Pennsylvania.....	1412 Belmont Street
Crawford, Arthur Burdeck; New York.....	1712 15th Street
Essex, John James; Maryland.....	744 Morton Street
Forbes, Samuel Dexter; Virginia.....	Alexandria, Va.
Gantz, Claudus Roy; District of Columbia.....	1245 G Street N.E.
Getz, Harry Rohrer; Pennsylvania.....	1712 15th Street
Grenfell, Frederick Aloysius; District of Columbia.....	1916 H Street
Hayes, Jesse; New Jersey.....	921 King Street, Alexandria, Va.
Kelser, Raymond Alexander; District of Columbia.....	231 14th Street N.E.
Miller, Howard Sydnor; Virginia.....	New Varnum Hotel
Munro, Joseph Briggs; Rhode Island.....	2707 11th Street
Reynolds, François Hûe Kári; Wisconsin.....	1608 Q Street
Shillinger, Jacob Edward; Maryland.....	Hyattsville, Md.
Trigg, William Stark; Virginia.....	306 Seaton Place N.E.
Whitney, Clifford Caswell; Massachusetts.....	1128 B Street N.E.

**SUMMARY**

Freshman.....	9
Junior.....	10
Senior.....	20
	<hr/>
	39

## GEOGRAPHICAL DISTRIBUTION

Alabama.....	9	Oklahoma.....	8
Arizona.....	2	Oregon.....	1
Arkansas.....	7	Pennsylvania.....	81
California.....	10	Rhode Island.....	7
Colorado.....	10	South Carolina.....	8
Connecticut.....	16	South Dakota.....	7
Delaware.....	3	Tennessee.....	15
District of Columbia.....	698	Texas.....	26
Florida.....	3	Utah.....	11
Georgia.....	6	Vermont.....	3
Idaho.....	6	Virginia.....	98
Illinois.....	38	Washington.....	13
Indiana.....	15	West Virginia.....	12
Iowa.....	25	Wisconsin.....	22
Kansas.....	7	Wyoming.....	3
Kentucky.....	13	Australia.....	1
Louisiana.....	5	Canada.....	3
Maine.....	12	China.....	4
Maryland.....	70	Colombia.....	1
Massachusetts.....	37	Cuba.....	2
Michigan.....	14	England.....	2
Minnesota.....	13	France.....	2
Mississippi.....	4	Germany.....	3
Missouri.....	17	Hawaii.....	3
Montana.....	6	Holland.....	2
Nebraska.....	12	Japan.....	1
Nevada.....	1	Mexico.....	2
New Hampshire.....	3	Panama.....	2
New Jersey.....	17	Philippine Islands.....	1
New Mexico.....	2	Porto Rico.....	6
New York.....	111	Russia.....	11
North Carolina.....	21	Sweden.....	2
North Dakota.....	5		
Ohio.....	30		
			<hr/> 1611

## GENERAL SUMMARY

## TEACHING STAFF

In many instances members of the Teaching Staff give only part time to the University:

Professors.....	71
Associate Professors.....	13
Associates.....	12
Assistant Professors.....	16
Lecturers and Instructors.....	59
Assistants and Demonstrators.....	18
Total.....	189

## STUDENTS REGISTERED IN THE UNIVERSITY DURING 1913-14

## Department of Arts and Sciences

School of Graduate Studies.....	92	
Columbian College.....	484	
College of Engineering.....	204	
Teachers College.....	130	
	911	
Duplicates.....	7	904

## Professional Department

Law School.....	355	
Medical School.....	175	
Dental School.....	80	
	610	
Duplicates.....	2	608

## Associated Colleges

National College of Pharmacy.....	70	
College of Veterinary Medicine.....	39	109
		1621
Duplicates.....		10
Total Registrations for the Year.....		1611



# DEGREES CONFERRED

AT COMMENCEMENT, 1913

## HONORARY

### Doctor of Laws

Alexander Graham Bell

### Doctor of Humane Letters

George Franklin Bowerman

### Master of Arts

Oscar Phelps Austin

## IN COURSE

### Doctor of Philosophy

Elmer Eugene Marshall.....Maryland  
A.B., 1889, Ohio Wesleyan University; S.T.B., 1894, Boston University.

### Master of Arts

Katherine Harper Bevard.....District of Columbia  
A.B. and Teacher's Diploma, 1911, George Washington University. (Master's Diploma in Education)

May Paul Bradshaw.....District of Columbia  
A.B., 1909, George Washington University.

Walter Edgar Hancock.....Texas  
A.B., 1912, George Washington University.

Joseph Douglas Hood.....Illinois  
A.B., 1910, University of Illinois.

Neil Merton Judd.....Utah  
A.B., 1911, University of Utah.

John Joseph Lenney.....Virginia  
A.B., 1913, George Washington University.

Margaret Bell Merrill.....Vermont  
A.B., 1899, Wellesley College.

Katharine Mitchell Newbold.....Maryland  
A.B., 1912, George Washington University.

**Master of Science**

Fitzhugh Green.....	Missouri
Graduate, 1909, United States Naval Academy.	
Edwin Henry Ingersoll.....	District of Columbia
S.B., 1911, George Washington University.	
Colin Mackenzie Mackall.....	Virginia
A.B., 1909; B.S. in Chemistry, 1910, University of Virginia.	
Wendell Clay Mansfield.....	New York
S.B., 1908, Syracuse University.	
Samuel Palkin.....	District of Columbia
Ph.B., 1910, Yale University.	

**Civil Engineer**

Robert John Potbury.....	District of Columbia
B.S. in C.E., 1912, George Washington University	
Augustin Mitchell Prentiss.....	District of Columbia
B.S. in C.E., 1911, George Washington University	
Joseph Addison Preston Scott, Jr.,.....	District of Columbia
B.S. in C.E., 1912, George Washington University	
Frank Veihmeyer.....	District of Columbia
B.S. in C.E., 1912, George Washington University	

**Electrical Engineer**

Henry Frank Wiegand.....	District of Columbia
B.S. in E.E., 1911, George Washington University.	

**Bachelor of Arts**

Charline Elizabeth Appleby.....	Indiana
(With distinction)	
Henry Godfrey Avers.....	Ohio
James Earl Black.....	New York
John Alexander Bowman.....	District of Columbia
Alice Burritt.....	District of Columbia
Grace Ella Church.....	Virginia
Minnie Carter Davis.....	Tennessee
Anne Elizabeth Draper.....	New York
LL.B., 1908, Washington College of Law; M.P.L., 1911, George Washington University	
Frank Blair Hanson.....	District of Columbia
Ralph Hospital.....	District of Columbia
Carlos Cranford Houghton.....	District of Columbia
Edwin Eugene Judd.....	District of Columbia
Eva Phelps Kelley.....	Maryland
Mary Katharine Kerby.....	District of Columbia

Rex Emir Kinsell.....	Iowa
Clarence Andrew Knudtson.....	Wisconsin
Alfred Briscoe Lindsay.....	District of Columbia
Lulu Mignonne McCabe.....	Kansas
(With distinction)	
Louis Archer Maxson.....	Maryland
(With distinction)	
Milton Donaldson Moore.....	South Carolina
Charles Hollister Potter.....	North Carolina
Arthur Huber Redfield.....	District of Columbia
(With distinction)	
Leila Fordham Scott.....	District of Columbia
Clara Stoll.....	District of Columbia
Olivia Alexander Taylor.....	Virginia
Hilda Louise Ulrickson.....	District of Columbia
Carl Maria Johann von Zielinski.....	Virginia

#### Bachelor of Arts and Teacher's Diploma

Jessie DuBois Fant.....	District of Columbia
(With distinction)	
Daisie Ione Huff.....	District of Columbia
Charles Albert Johnson.....	District of Columbia
John Very Macdonald.....	Nova Scotia
Ella May Monk.....	New York
Kate Sorrell Outwater.....	District of Columbia
Harriet Underwood.....	District of Columbia
Mary Josephine White.....	Maryland

#### Bachelor of Science in Chemistry

Isaac Maurice Bortman.....	Pennsylvania
Henry Albert Lepper.....	District of Columbia
Louis Lodholz.....	Pennsylvania
Morris A. Pozen.....	District of Columbia
(With distinction)	
James Norman Taylor.....	Delaware
Arthur Stockton Thatcher.....	Pennsylvania

#### Bachelor of Science in Civil Engineering

Edwin Day Burchard.....	District of Columbia
Donald Langley Dutton.....	District of Columbia
John Rochford Dwyer.....	District of Columbia
Howard Wilkinson Hodgkins.....	District of Columbia
(With distinction)	
Theodore Tilton Kirk.....	Kentucky
Malcolm Gordon Slarrow.....	District of Columbia

**Bachelor of Science in Electrical Engineering**

Arthur Hervey Brame.....	District of Columbia
Omar Bailey Buchanan.....	District of Columbia
(With distinction)	
Edwin Summer Hoffman.....	Pennsylvania
William Michael Leonard.....	Pennsylvania
(With distinction)	
Francis Edwin Marvin.....	New York

**Bachelor of Science in Mechanical Engineering**

Henry Hornor Snelling.....	Virginia
(With distinction)	

**Master of Diplomacy**

Leonard Atkins Merritt.....	Minnesota
Louis Roy Zapf.....	Tennessee

**Master of Laws**

Horace Greeley Macfarland.....	District of Columbia
Graduate, 1891, United States Naval Academy; LL.B., 1912,	
George Washington University	

**Bachelor of Laws**

Frank Augustus Barlow.....	Minnesota
A.B., 1910, University of Minnesota	
Frank Albert Bower.....	New York
M.E., 1910, Cornell University	
John St. Clair Brookes, Jr.....	District of Columbia
A.B., 1907; A.M., 1910, George Washington University; (With	
distinction).	
George Burton Buck.....	Maryland
Victor Cobb.....	Virginia
S.B., 1908, Harvard University; (With distinction).	
Alfred C. Cordon.....	Idaho
Edward Celestine Coumbe.....	Washington
Robert Todd Daniel.....	District of Columbia
(With distinction)	
Myron Mathews Davis.....	Maine
S.B., 1909, Massachusetts Institute of Technology.	
Arthur Hannum Deibert.....	District of Columbia
William Ira Denning.....	Georgia
Clarence Bigelow Des Jardins.....	Michigan
A.B., 1909, Kalamazoo College.	
Richard Crosby De Wolf.....	Massachusetts



John Astor Diener.....	Indiana
B.S. in E.E., 1910, Purdue University.	
William John Dow.....	Missouri
Harry E. Dunham.....	New York
E.E., 1906, Syracuse University.	
J. Ralph Fehr.....	Illinois
Peter Royal Feldman.....	Wisconsin
David Edward Finley, Jr.....	South Carolina
A.B., 1910, University of South Carolina.	
Charles Hugh Gibbon.....	Wisconsin
Edwin Roy Jackson.....	Iowa
S.B., 1904, State University of Iowa.	
Frank Rumer Jeffrey.....	Washington
Raphael S. Klein.....	Colorado
Morris Willson Knowlton.....	Maine
(With distinction)	
Frederick Eugene Kunkel.....	Pennsylvania
William Ludwig Larson.....	South Dakota
I. Burt Lazarus.....	Massachusetts
Lawrence A. Gale Miller.....	Massachusetts
A.B., 1908, Harvard University; (With distinction).	
Maurice Malcolm Moore.....	Michigan
William Lester Morrison.....	Massachusetts
Ralph Munden.....	Pennsylvania
M.E., 1906, Cornell University.	
Charles F. Randolph Ogilby, Jr.....	District of Columbia
Arnold Clarence Otto.....	Wisconsin
A.B., 1911, Lawrence College; A.B., 1911, George Washington University.	
Roscoe Milliken Packard.....	District of Columbia
A.B., 1899; A.M., 1900, Western Reserve University; (With distinction).	
William Waterman Paddock.....	Iowa
Charles Kaufman Phillips.....	New Jersey
A.B., 1909, Princeton University.	
Neil De Forest Preston.....	New York
M.E., 1908, Cornell University.	
Harry Fox Roller.....	Kansas
A.B., 1906, University of Kansas.	
Breckenridge Cabell Rust.....	District of Columbia
Frank Seymour Smith.....	District of Columbia
A.B., 1910, Wesleyan University; (With distinction).	
George Walter Smith.....	Pennsylvania
Burr Shearer Stottle.....	Missouri
(With distinction)	
Charles Alonzo Straw, Jr.....	Massachusetts
A.B., 1901, Harvard University.	

William Strong, Jr.	District of Columbia
Ralph Richard Stuart.	Iowa
Wilson Lewis Townsend.	Maryland
Clarence Stevens Walker.	Massachusetts
A.B., 1904, Harvard University.	
Joseph Henry Waters.	District of Columbia
B.S. in E.E., 1910, George Washington University.	
Paul Herbert Watson.	Kansas
Hubert Shadrach White.	Virginia
Irving Thomas Wilson.	Maryland
Robert Mathias Zacharias.	Pennsylvania
A.B., 1907, Franklin and Marshall College.	

#### Bachelor of Law

Theodore Henry Eickhoff.	Indiana
B.S. in E.E., 1908, Purdue University.	

#### Doctor of Medicine

Sewall Munson Corbett.	Virginia
Richard Laureno De Saussure.	South Carolina
Leonard Harrison English.	Pennsylvania
Roy Macleay Fortier.	California
Josiah Baker Henneberger.	Maryland
(With distinction)	
Walter Harold Lott.	District of Columbia
Louis John Regan.	New York
Joseph Duerson Stout.	Virginia
A.B., 1910, George Washington University; (With distinction).	
May Turner Stout.	District of Columbia

#### Doctor of Dental Surgery

Edward Crawford Alley.	Kentucky
Elmer E. Briggs.	Pennsylvania
Marie G. Brodsky.	Russia
Claude Durfee.	Illinois
Nathan Eisenstein.	Massachusetts
John S. Hardester.	District of Columbia
Carl Burdette Maphis.	Virginia
John Preston Marstella.	Illinois
Charles Walter Rich.	Pennsylvania
Walter Brittin Silliman.	Pennsylvania
Henry Merle Spillan.	New York
George Elwood White.	Massachusetts
Edward Williams.	Massachusetts

**Doctor of Pharmacy**

Charles Willis Barker.....	Maryland
Ralph Van Sickler Chamblin.....	Virginia
Samuel James Hohberger.....	Maryland
Raymond D. Kinsey.....	District of Columbia
David Lander Maxwell.....	Tennessee
Anna E. Mix.....	Maryland
Bert Alexander Smyser.....	Pennsylvania
Edwin G. Swann.....	Maryland
Irving Alexander Tennyson.....	Virginia
Lawrence B. Whitley.....	North Carolina
William Henry Whittlesey, Jr.....	Ohio

**Doctor of Veterinary Medicine**

Jacob E. Behney.....	Pennsylvania
George Henry Gillette.....	Kansas
Ernest George Hargett.....	North Carolina
William Anson Hooker.....	Massachusetts
Fred William Lambert.....	Maryland
Edward Joseph McLaughlin.....	Illinois
Julius Edward Morcock.....	Georgia
James Buchanan Nicol.....	Virginia
Clarence Reuben Potteiger.....	Pennsylvania

**AT FALL CONVOCATION, 1913****IN COURSE****Doctor of Philosophy**

Thomas Latimer Kibler.....	Virginia
A.B., 1904, Randolph Macon College; A.M., 1908, George Washington University.	

**Master of Science**

Peter Valaer, Jr.....	North Carolina
S.B., 1906, North Carolina College of Agriculture and Mechanic Arts.	

**Bachelor of Arts**

Meta Schmidt.....	District of Columbia
-------------------	----------------------

**Bachelor of Arts and Teacher's Diploma**

Cora Amelia Ossire.....	District of Columbia
-------------------------	----------------------

**Bachelor of Laws**

Robert Bacon Krogstad.....	District of Columbia
----------------------------	----------------------

## AT WINTER CONVOCATION, 1914

## IN COURSE

## Doctor of Philosophy

Hartley Harrad Thompson Jackson.....District of Columbia  
A.B., 1904, Milton College; A.M., 1909, University of Wisconsin.

## Master of Science

Olaf Mandt Hustvedt.....Iowa  
Graduate, 1909, United States Naval Academy.

## Bachelor of Arts and Teacher's Diploma

Florence Virginia Morrison Corson.....Maryland

## Master of Laws

Arthur John Kause.....Ohio  
LL.B., 1913, George Washington University.

## Bachelor of Laws

Harvey Cleveland Bickel.....Pennsylvania  
James Ora Tolbert.....Iowa



# ALLIED ASSOCIATIONS

## ALUMNI ASSOCIATIONS

### THE GENERAL ASSOCIATION

Officers, 1913-14

*President*

J. HOLDSWORTH GORDON

*Vice-Presidents*

JOSEPH STEWART  
E. A. BYRNES  
T. N. McLAUGHLIN

L. RUSSELL ALDEN  
E. L. THURSTON  
C. C. CALHOUN

*Secretary*

H. L. HODGKINS

*Treasurer*

JOHN B. LARNER

*Executive Committee*

J. HOLDSWORTH GORDON, *Chairman*

HOWARD L. HODGKINS, *Secretary*

L. RUSSELL ALDEN  
HENRY P. BLAIR  
DR. W. R. BOYER  
E. ROGER BOYLE  
EUGENE A. BYRNES  
C. C. CALHOUN  
DR. E. M. COLVIN  
HARRY C. DAVIS  
H. BLAKE GORDON  
PERCIVAL HALL

DR. A. W. KENNER  
JOHN B. LARNER  
PHILIP F. LARNER  
DR. T. N. McLAUGHLIN  
DR. N. W. POMEROY  
MASON N. RICHARDSON  
JOSEPH STEWART  
DR. MILLARD F. THOMPSON  
ERNEST L. THURSTON  
WILLIAM J. WALLIS

DR. J. J. WHARTON

Since its organization in 1821, the University has conferred 8087 degrees upon 6549 persons.

The Secretary of the General Alumni Association, whose office is at the University, endeavors to keep a list of the addresses of all Alumni. His catalogue now contains the addresses of about 4200 graduates. It is known that about 1400 are dead, and information is lacking in regard to the others. All Alumni are urged to keep the Secretary informed of any change of address or occupation, and to supply information in regard to their fellow Alumni.

## THE UNIVERSITY

## NEW YORK ALUMNI ASSOCIATION

*President*, FRITZ V. BRIESEN

*Secretary*, ALMON C. KELLOGG, 30 Broad Street

## COLORADO ALUMNI ASSOCIATION

*President*, CLARENCE A. BRANDENBURG

*Secretary*, PAUL M. CLARK, Symes Building, Denver, Colorado

## SALT LAKE CITY ALUMNI ASSOCIATION

*President*, DR. WILLIAM F. BEER

*Secretary*, CULBERT L. OLSON, 1121 Boston Building

## PUGET SOUND ALUMNI ASSOCIATION

*President*, JUDGE H. F. GARRETSON, Tacoma, Washington

*Secretary*, JOHN ARTHUR, New York Building, Seattle, Washington

## LOS ANGELES ALUMNI ASSOCIATION

*President*, H. E. HAAS

*Secretary*, C. R. NAFF, 409 Chamber of Commerce

## SAN FRANCISCO ALUMNI ASSOCIATION

*President*, MONTAGUE T. MOSES

*Secretary*, WILEY F. CRIST, Monadnock Building

## OREGON ALUMNI ASSOCIATION

*President*, H. A. CONNOR, 26 North Front St., Portland, Oregon

## SPOKANE ALUMNI ASSOCIATION

*President*, CHARLES R. CONNOR.

*Secretary*, THOMAS A. SCOTT, The Rookery

## MINNESOTA ALUMNI ASSOCIATION

*President*, EDMUND S. DURMENT

*Secretary*, F. G. STUTZ, West Publishing Company, St. Paul.

THE COLUMBIAN WOMEN

*President*

MRS. MARTIN A. KNAPP

*First Vice-President*

MRS. OSCAR A. MECHLIN

*Second Vice-President*

MISS MARGARET WHITE

*Corresponding Secretary*

MISS KATHERINE KOETZ

*Recording Secretary*

MISS M. ELIZABETH FORD

*Treasurer*

MISS ANNA S. HAZELTON

*Historian*

MISS MARION THATCHER

BOARD OF LADY MANAGERS OF THE UNIVERSITY HOSPITAL

*President*

MRS. FREDERICK W. TRUE

*First Vice-President*

MRS. ELIZABETH WALBRIDGE

*Second Vice-President*

MRS. CHARLES H. STOCKTON

*Corresponding Secretary*

MRS. J. LAWN THOMPSON

*Recording Secretary*

MRS D. K. SHUTE

*Treasurer*

MRS. S. E. LEWIS





## DIRECTORY

### OFFICERS OF GOVERNMENT, ADMINISTRATION, AND INSTRUCTIONS

The number enclosed in brackets indicates the page in this catalogue on which may be found the full name, degree and title of the officer.

ABBE, T., [36].....	1819 M Street
ACKER, G. N., [32].....	913 16th Street
ALDEN, L. R., [35].....	809 L Street
ALDERMAN, Z. W., [37].....	Kenois Building
ASHLEY, R. S., [37].....	1100 M Street
AUSTIN, O. P., [36].....	3301 Newark Street
BARNES, N. P., [34].....	208 Maryland Avenue N.E.
BARTSCH, P., [33].....	2416 14th Street
BASSETT, C. T., [34].....	1409 L Street
BASSLER, R. S., [35].....	U. S. National Museum
BEEKMAN, D. D., [34].....	New District National Bank Building
BEESON, L. W., [179].....	664 Massachusetts Avenue
BENTON, R. W., [37].....	462 O Street
BERNHARD, J. W., [37].....	710 14th Street
BEYER, H. G., [28].....	The Marlborough
BIBB, A. B., [33].....	1721 21st Street
BOLTON, B. R., [37].....	3104 P Street
BORDEN, D. L., [37].....	Columbia Hospital
BORDEN, W. C., [33].....	Tracy Place
BOVEE, J. W., [32].....	The Rochambeau
BOWEN, W. S., [34].....	1339 Connecticut Avenue
BRADBURY, H. M., [179].....	1304 Park Road
BRADBURY, W. H., [179].....	1304 Park Road
BRANDENBURG, E. C., [33].....	344 D Street
BRIDE, W. W., [184].....	2264 Cathedral Avenue
BRIGHAM, G. R., [37].....	Smithsonian Institution
BRIGGS, J. R., [34].....	1628 K Street
BROWN, B., [36].....	806 17th Street
BROWNE, A. B., [28].....	1855 Wyoming Avenue
BUCK, J. M., [184].....	933 K Street
BUCKINGHAM, D. E., [184].....	2113 14th Street
BUHRMAN, A. G., [36].....	Clerk's Office, City Hall
BUTLER, H. K., [179].....	229 9th Street S.E.
BUTLER, W. K., [33].....	1207 M Street

CABELL, J. M., [34].....	1730 M Street
CALL, A. D., [37].....	1820 Newton Street
CAMPBELL, C. B., [28].....	17th Street and Park Road
CARMICHAEL, R. B., [32].....	818 17th Street
CARR, R. J., [184].....	2113 14th Street
CARROLL, M., [33].....	3440 34th Place, Cleveland Park
CERVONN, F. M., [137].....	1335 H Street
CHIPMAN, C. N., [36].....	606 6th Street S.W.
CHURCH, M., [32].....	1608 20th Street
CLARKE, F. W., [32].....	1612 Riggs Place
CLAYTOR, T. A., [32].....	1826 R Street
CLEPHANE, W. C., [33].....	Chevy Chase, Md.
COBB, R., [36].....	2025 Kalorama Road
COHEN, L., [37].....	1855 Calvert Street
CONKLIN, C. B., [35].....	1342 R Street
CONSTANTINI, C. L., [36].....	21 8th Street N.E.
COPELAND, E. P., [34].....	The Rockingham
COPPING, J. B., [137].....	1335 H Street
CRAIG, H. K., [35].....	1224 I Street
CRANE, A. B., [34].....	1424 K Street
CULLOM, E., [37].....	1433 Rhode Island Avenue
CURTIS, H. L., [37].....	U. S. Bureau of Standards

DAVIS, C. L., [34].....	The Fulford
DAVIS, H. C., [28].....	1006 Massachusetts Avenue
DEFARGES, J. R., [34].....	The Laclede Apartment House
DONNALLY, H. H., [35].....	1612 I Street
DULANY, H. R., [184].....	1333 F Street
DUNSTAN, E. V., [34].....	3616 Newark Street
DYE, H. S., [36].....	1327 L Street N.W.

EARNEST, J. P., [33].....	2123 N Street
EASTERDAY, H. C., [179].....	700 New Jersey Avenue N.W.
EISENBERG, A. A., [184].....	1206 N Street N.W.
ELLIOTT, H. R., [35].....	The Farragut
EUSTIS, W. C., [184].....	1611 H Street
EVANSHA, J. F., [37].....	1125 14th Street

FERSON, M. L., [35].....	Argyle Apartment House
FETTER, H. H., [184].....	3013 Dumbarton Avenue
FILLEBROWN, J. P., [137].....	George Washington University Hospital
FLATHER, W. J., [28].....	2033 R Street
FLEMER, L., [179].....	701 Maryland Avenue N.E.
FLOYD, H. B., [179].....	1736 U Street, N.W.
FORTIER, R. M., [137].....	2310 19th Street
FOWLE, F. E., [36].....	Smithsonian Institution

FRANKLAND, W. A., [35].....	Champlain Apartment House
FRANKLIN, E. T. M., [36].....	1315 19th Street
FRANZ, S. I., [33].....	Government Hospital for Insane
FRASE, E., [34].....	1467 Irving Street
FRASER, W. W., [37].....	1404 Perry Street N.W.
FRENCH, W. J., [36].....	1634 S Street N.W.
FULLER, H. G., [36].....	The Farragut
GARNETT, A. Y. P., [36].....	1214 18th Street N.W.
GILL, T. N., [32].....	Smithsonian Institution
GLASCOCK, M. W., [137].....	George Washington University Hospital
GLUECK, B., [37].....	Government Hospital for Insane
GORDON, H. H., [36].....	1755 Lamont Street
GORDON, J. H., [28].....	412 5th Street
GREGORY, C. N., [34].....	2139 Wyoming Avenue
GROSS, C. E., [179].....	14th Street and Park Road
GRUBB, V. M., [184].....	2320 Ontario Road
HAGNER, F. R., [33].....	The Farragut
HALL, A., JR., [33].....	Naval Observatory
HALL, C. L., [137].....	George Washington University Hospital
HALL, M. C., [184].....	2113 14th Street
HARRINGTON, G. T., [37].....	612 Randolph Street
HARRIS, A. L., [35].....	1505 Lamont Street
HARSCH, E., [37].....	1318 Maryland Avenue N.E.
HAZEN, H. H., [179].....	The Rochambeau
HENNING, G. N., [33].....	1728 20th Street
HENRY, F. C., [179].....	703 15th Street
HICKS, T., [184].....	621½ Park Road
HILL, E. A., [35].....	1221 K Street
HILTON, S. L., [179].....	2140 L Street
HODGKINS, H. G., [36].....	Naval Observatory
HODGKINS, H. L., [32].....	1830 T Street
HOLMES, C. W., [30].....	Rockville, Md.
HOOTON, P. R., [37].....	The Holland
HOPKINS, A., [28].....	1826 Massachusetts Avenue
HOPKINS, H. C., [165].....	The Rochambeau
HOPKINS, N. M., [35].....	2128 Bancroft Place
HOPKINS, T. S., [28].....	Hibbs Building
HORNADAY, F. A., [34].....	3509 14th Street
HOWARD, B. J., [179].....	1366 N. C. Avenue N.E.
HUGINS, F. A., [184].....	2113 14th Street
HULL, J. A. T., [184].....	1762 N Street N.W.
HUMPHREYS, W. J., [33].....	Cosmos Club
HUNTER, O. B., [34].....	2021 H Street
HUNTINGTON, W. H., [37].....	1217 Connecticut Avenue
HYDE, C. W., [36].....	The Alabama

INGERSOLL, E. H., [37].....	2118 3rd Street N.E.
JACKSON, V. B., [36].....	The Brunswick
JAEGER, H. W., [37].....	424 East Capitol Street
JESSEE, W. B., [184].....	2113 14th Street
JOHN, W. C., [37].....	Takoma Park, D. C.
JONES, H. C., [35].....	The Earlington
KAIN, H. G., [37].....	129 E Street
KALUSOWSKI, H. E., [179].....	808 I Street
KARGER, T., [37].....	2616 Cathedral Avenue
KELLEY, J. T., [35].....	1312 15th Street
KEMBLE, A., [36].....	The Cecil
KERFOOT, W. T., [179].....	69 W Street N.W.
KERN, R. R., [35].....	The Woodworth
KERR, H. H., [36].....	1742 N Street
KILLINGER, W. C., [37].....	Northeast Corner 13th and I Streets
KING, A. F. A., [32].....	1315 Massachusetts Avenue
KING, W. B., [28].....	728 17th Street
LADD, J. M., [38].....	134 11th Street S.E.
LAGARDE, L. A., [33].....	2624 Woodley Place
LARNER, J. B., [28].....	1709 19th Street
LATIMER, J. W., [34].....	1816 F Street
LAWRENCE, W. F., [34].....	1616 I Street
LAWSON, H. W., [34].....	1117 Vermont Avenue
LAYTON, R. E., [37].....	1311 Wisconsin Avenue
LEECH, F., [35].....	1372 Columbia Road
LEPPER, H. A., [37].....	1620 6th Street
LEWIS, E. S., [37].....	Box 21, Ballston, Va.
LINDSEY, J. W., [137].....	1808 Kilbourne Place N.W.
LISNER, A., [28].....	1723 Massachusetts Avenue
LITTLEHALES, G. W., [34].....	2132 LeRoy Place
LOCHBOEHLER, H. A., [184].....	634 Pennsylvania Avenue S.E.
LOCKWOOD, J., [184].....	905 New Jersey Avenue
LOGIE, B. R., [36].....	1836 Connecticut Avenue N.W.
MACDONALD, G. B. R., [37].....	721 E. Capitol Street
MACFARLAND, H. B. F., [28].....	1420 New York Avenue
MACKALL, L., [34].....	3044 O Street
McKIMMIE, O. A. M., [34].....	The Cumberland
MACMILLAN, J. T., [37].....	1314 12th Street N.W.
McNEIL, H. C., [35].....	1210 Decatur Street
McNEMAR, L. C., [35].....	1912 G Street
MALLORY, W. J., [36].....	1720 Connecticut Avenue
MANN, A., [33].....	Imperial Apartment House



MAURER, R., [138].....2029 Park Road N.W.  
 MEARNS, W. A., [28].....2301 S Street  
 MECHLIN, O. A., [34].....3203 R Street N.W.  
 MENGE, G. A., [179].....1812 G Street  
 MERRILL, G. P., [32].....U. S. National Museum  
 MERRILL, W. H., [36].....The Northumberland  
 MILLER, G. B., [34].....1730 K Street  
 MOORE, W. C., [35].....Wyoming Apartment House  
 MOORE, W. L., [33].....Rockville, Md., R. F. D.  
 MORGAN, J. D., [33].....919 15th Street  
 MORSE, R. W., [36].....Patent Office  
 MORTIMER, C. W., [35].....The Woodworth  
 MULLIGAN, E. W., [38].....1101 L Street  
 MUNCASTER, A., [179].....482 Louisiana Avenue  
 MUNROE, C. E., [32].....2115 S Street

NICHOLS, J. B., [35].....1321 Rhode Island Avenue  
 NOYES, T. W., [28].....1730 New Hampshire Avenue

ODOR, C. L., [34].....906 G Street  
 OMER, J. A., [137].....George Washington University Hospital

PAGAN, A. E., [37].....1965 Biltmore Street  
 PERKINS, H. C., [28].....1701 Connecticut Avenue  
 PETER, A., [33].....Washington Loan and Trust Building  
 PFEIFFER, J. A. F., [37].....Government Hospital for Insane  
 PHILLIPS, G. W., [38].....612 18th Street N.W.  
 POTTER, G. M., [184].....Ontario Apartment House  
 PRENTISS, D. W., [35].....1213 M Street  
 PRICE, T. M., [35].....The Iowa

RANDOLPH, B. M., [33].....2010 R Street N.W.  
 REICHELDERFER, L. H.,.....1721 Connecticut Avenue  
 REUTER, F. A., [38].....1337 Park Road  
 RICHARDSON, C. W., [32].....1317 Connecticut Avenue  
 RICHARDSON, E. E., [34].....522 1st Street S.E.  
 RICHARDSON, W. S., [179].....316 4½ Street S.W.  
 RIGGLES, J. L., [35].....1424 K Street  
 ROLLINGS, J. A., [137].....George Washington University Hospital  
 REUDIGER, W. C. [33].....1754 Church Street  
 RUFFIN, S., [32].....1335 Connecticut Avenue  
 RUST, T. L., [36].....1408 L Street

SATTERLEE, R. C., [38].....518 H Street, Apt. 43  
 SCHMIDT, A. F. W., [33].....35 Bryant Street  
 SCHOENFELD, H., [32].....3448 34th Street, Cleveland Park

SCHWINN, G. H., [36].....	Government Hospital for the Insane
SEIBERT, E. G., [36].....	1545 I Street N.W.
SHANDS, A. R., [32].....	901 16th Street
SHARP, G. M., [35].....	The Rochambeau
SHOEMAKER, C. G., [36].....	826 Connecticut Avenue
SHUTE, D. K., [32].....	1719 DeSales Street
SIMPSON, C. A., [35].....	1610 20th Street N.W.
SINGLETON, W. H., [28].....	2020 H Street
SLOAT, J. I., [37].....	The Congressional Apartment
SMALL, W. S., [36].....	1340 Irving Street
SMITH, C. S., [33].....	304 Takoma Avenue, Takoma Park, D. C.
SNYDER, A. A., [33].....	1126 16th Street N.W.
SOWERS, W. F. M., [35].....	1707 Massachusetts Avenue
STACHNIEVICK, J. H., [38].....	3479 Holmead Place
STAFFORD, W. P., [33].....	1725 Lamont Street
STARR, F. C., [35].....	901 Wilkins Building
STAVELY, A. L., [33].....	1744 M Street
STERNBERG, G. M., [33].....	2005 Massachusetts Avenue
STITT, E. R., [34].....	1708 R Street
STOCKARD, M., [37].....	The Lamont
STOCKTON, C. H., [32].....	2019 O Street N.W.
STONE, E. R., [35].....	The Champlain
STOUT, J. D., [34].....	2918 Georgia Avenue N.W.
STUART, A. T., [28].....	The Wyoming
SUPPLEE, E. D., [137].....	311 A Street N.E.
SUTTON, L. H., [37].....	Patent Office
SWETT, O. D., [35].....	Chevy Chase, Md.
SWISHER, C. C., [32].....	1810 Kalorama Road
SZE, T. P., [137].....	2750 14th Street
TAYLOR, J. W., [36].....	1616 I Street N.W.
THOMPSON, H. C., [32].....	3500 13th Street
THOMPSON, J. F., [32].....	The Rochambeau
TIBBETS, A. P., [165].....	The Laclede
TITUS, E. W., [37].....	911 16th Street N.W.
TSCHIFFELY, D., [179].....	475 Pennsylvania Avenue
TURNER, J. P., [184].....	916 O Street
VAN ORSTRAND, C. E., [37].....	1607 31st Street
VAN VLECK, W. C., [37].....	Friendship Heights, D. C.
WAGNER, S. M., [179].....	85 H Street N.W.
WALTON, J. R., [33].....	724 9th Street
WALTON, R. R., [38].....	1123 13th Street
WEAKLEY, A. D., [36].....	1339 K Street
WEAVER, C. E., [38].....	131 11th Street N.E.

WELLER, F. P., [179].....	755 8th Street S.E.
WELLINGTON, J. R., [33].....	1723 Connecticut Avenue
WHITE, C. S., [33].....	911 16th Street, N.W.
WHITE, H., [28].....	1624 Crescent Place
WHITE, W. A., [33].....	Government Hospital for Insane
WILBUR, W. A., [32].....	2103 S Street
WOLFE, A. S., [34].....	710 14th Street
WOODHULL, M. VAN Z., [28].....	2033 G Street
WOODWARD, M. R., [36].....	2145 California Street
WOODWARD, W. C., [33].....	1782 Lanier Place
YARROW, H. C., [32].....	2116 Bancroft Place
YOUNG, H. C., [36].....	3104 N Street





# INDEX

- Academic year, 27.
- Acker Prize, 162.
- Administrative Officers, 30.
- Admission Requirements:
  - The Colleges, general statement, 51.
  - Examination Schedule, 51.
  - Definitions, 52.
  - Advanced standing, 60.
  - Columbian College, 68.
  - College of Engineering, 78.
  - Teachers College, 83.
  - School of Graduate Studies, 46.
  - Law School, 121.
  - Medical School, 141.
  - Dental School, 166.
  - National College of Pharmacy, 180.
  - College of Veterinary Medicine, 185.
- Alumni Associations, 265.
- American Law Book Co. Prize, 132.
- Anatomy, 147, 168, 172.
- Applied Mathematics, 98.
- Appointments, Terms of, 27.
- Archaeology, 86.
- Architecture, 87.
- Arts and Sciences, Department of, 43.
  - Faculty, 43.
  - School of Graduate Studies, 46.
  - The Colleges, 51.
  - Instruction, 86.
  - Fees, 66.
  - Students, 199.
- Art, History of, 86.
- Associated Colleges, 177.
  - Organization, 19, 25.
  - National College of Pharmacy, 179.
  - College of Veterinary Medicine, 184.
- Associations, Allied, 265.
  - Alumni, 265.
  - Columbian Women, 267.
  - Lady Managers of the Hospital, 267.
- Astro-Physics, 89.
- Auditor, 24.
- Bacteriology, 151, 170.
- Biological Science, 89.
- Botany, 90.
- Business organization, 95.
- Butler Prize, 162.
- By-Laws, 20.
- Byrne & Co. Prize, 132.
- Calendar, 1914-15, 7.
  - University, 8.
  - National College of Pharmacy, 180.
- Carter, Henry Harding, Scholarships, 61.
- Carter, Maria M., Scholarship, 61.
- Chapel, 66.
- Charter, 9.
- Chemistry, 90, 149, 168.
- Chi Omega Prizes, 64.
- Civil Engineering, 98.
- Classical Languages, 92.
- Colleges:
  - Organization, 25.
  - Of the Department of Arts and Sciences, 51.
  - Associated, 177.
- Colonial History Prize, 64, 65.
- Columbian College, 68.
  - Faculty, 45.
  - Admission Requirements, 68.
  - Graduation Requirements, 69.
  - Political Science Courses, 71.
  - Combination Courses, 74.
  - Pre-medical courses, 74.
  - Scholarships and Prizes, 60.
  - Fees, 66.
  - Students, 205.
- Columbian Women, 267.
  - Loan Fund, 63.
- Commencement, 38.
- Commercial Geography, 94.
- Committees: Of the Trustees, 29.
  - Of the President's Council, 31.
- Consular Service, 71.
- Council, President's, 26, 31.
- Counsel, 23.
- Cutter, E. K., Prize, 63, 65.
- Davis Prizes 63, 65.
- Davis Prize, Speaking, 65.
- Davis Scholarship, 61, 65.
- Daughters of the American Revolution
  - Prizes, 63, 65.
- Deans, 26.
- Debating, 31, 132.
- Degrees, Requirements for:
  - A.B., 68, 74, 76, 84.
  - B.S. in Chem., 70.
  - B.S. in C.E., 79.
  - B.S. in E.E., 79, 80.
  - B.S. in M.E., 79, 81.
  - B.S. in Med., 75, 142.
  - B.S. in Arch., 79, 82.
  - A.M., S.M., 46.
  - C.E., E.E., M.E., 46.
  - Ph.D., 47.
  - LL.B., 124.
  - LL.M., 127.
  - M.P.L., 127.
  - M.D., 162.
  - D.D.S., 174.
  - Phar. D., 181.
  - D.V.M., 194.
  - Combination courses, 74, 124, 141.
- Degrees Conferred, 257.
- Dental Infirmary, 173.
- Dental School, 165.
  - Faculty, 165.
  - Clinical Staff, 173.
  - Infirmary, 173.
  - Admission Requirements, 166.
  - Graduation Requirements, 174.
  - Instruction, 167.
  - Fees, 183.
  - Students, 249.
- Department of Arts and Sciences, 43.
  - Faculty, 43.
  - School of Graduate Studies, 46.
  - The Colleges, 51.
  - Instruction, 86.
  - Fees, 66.
  - Students, 199.
- Dermatology, 154.
- Diagnosis, Physical, 154.

- Dietetics, 151.
- Diplomacy, 115.
- Dispensary Staff, 137.
- Doctorate Disputations, 49.
- Drawing, 88.
- Economics, 93.
- Education, 95.
- Electrical Engineering, 100.
- Ellsworth Prize, 132.
- Elton Prize, 63.
- Engineering, College of, 78.
  - Faculty, 45.
  - Admission Requirements, 78.
  - Graduation Requirements, 79.
  - Scholarships and Prizes, 60.
  - Fees, 66.
  - Students, 205.
- Engineering, 98.
  - Civil, 98.
  - Electrical, 100.
  - Mechanical, 103.
- English, 104.
- Faculties:
  - Organization, 25.
  - University Teaching Staff, 32.
  - Arts and Sciences, 43.
  - Graduate Studies, 45.
  - Columbian College, 45.
  - Engineering and Mechanic Arts, 45.
  - Teachers College, 45.
  - Law School, 119.
  - Medical School, 134.
  - Dental School, 165.
  - Pharmacy, 179.
  - Veterinary Medicine, 184.
- Farnham Scholarship, 61.
- Fees:
  - Arts and Sciences, 66.
  - Law School, 133.
  - Medical School, 163.
  - Dental School, 175.
  - Pharmacy, 183.
  - Veterinary Medicine, 195.
- Finance, 94.
- Fitch, W. E., Prize, 64, 65.
- French, 117.
- Genito-Urinary Diseases, 157.
- Geographical Distribution, 255.
- Geography, Commercial, 94.
- Geology, 105.
- German, 106.
- Governmental Privileges, 39.
- Graduate Studies, School of, 45.
  - Faculty, 45.
  - Admission Requirements, 46.
  - Qualification for Degrees, 46.
  - Doctorate Disputations, 49.
  - Fees, 66.
  - Students, 199.
- Graphics, 102.
- Greek, 92.
- Gynecology, 158.
- Hagner Prize, 163.
- Histology, 170.
- History, 108.
- Hospital:
  - Staff, 136.
  - Appointments, 163.
  - Lady Managers of the, 267.
- Hubbard, G. G., Memorial Prize, 64, 65.
- Hygiene, 159.
- Infirmity, Dental, 173.
- Instruction:
  - Arts and Sciences, 86.
  - Law, 124.
  - Medicine, 145.
  - Dentistry, 167.
- Instruction:
  - Pharmacy, 181.
  - Veterinary Medicine, 186.
- International Law, 115.
- Jurisprudence:
  - Medical, 155.
  - Dental, 172.
- Kendall Scholarship, 61.
- Latin, 93.
- Laryngology, 157.
- Law School, 119.
  - Faculty, 119.
  - Admission Requirements, 121.
  - Instruction, 124.
  - Degrees, 131.
  - Moot Court Work, 127.
  - Debating, 132.
  - Examination Regulations, 130.
  - Library, 131.
  - Prizes, 131.
  - Fees, 133.
  - Students, 230.
  - College Graduates, 244.
- Law, International, 115.
  - Patent, 127.
- Library:
  - University, 38.
  - Law, 131.
  - Medical, 139.
- Materia Medica, 150, 169.
- Mathematics, 109.
  - Applied, 98.
- Mechanical Engineering, 103.
- Medical School, 134.
  - Faculty, 134.
  - Hospital Staff, 136.
  - Dispensary Staff, 137.
  - Admission Requirements, 141, 144.
  - Premedical year, 141.
  - Combination courses, 142.
  - Instruction, 145.
  - Clinical Facilities, 159.
  - Examination Regulations, 161.
  - Graduation Requirements, 162.
  - Prizes, 162.
  - Fees, 163.
  - Students, 245.
- Medicine, Subject, 152.
  - Preventive, 116.
  - Tropical, 153.
- Metallurgy, 172.
- Meteorology, 110.
- Military Surgery, 157.
- Mineralogy, 105.
- Ministerial Aid, 62.
- Moot Court, 127.
- Morehouse Scholarship, 61.
- Muth Prize, 64.
- Nautical Science, 110.
- Neurology, Clinical, 154.
- Obstetrics, 158.
- Officers:
  - Trustee, 29.
  - Administrative, 30.
- Operative Dentistry, 163.
- Operative Technics, 171.
- Ophthalmology, 137.
- Oral Prophylaxis, 173.
- Ordinance, 25.
- Ordronaux Prize Scholarship, 131, 162.
- Organization:
  - University, 38.
  - Departments, Colleges, and Schools, 25.
  - Faculties, 25.
  - President's Council, 26.
- Ornithology, 90.
- Orthodontia, 167.
- Orthopedics, 157.

- Otology, 157.
- Paleontology, 106.
- Patent Law, 127.
- Pathology, 151, 170.
- Surgical, 156.
- Pediatrics, 154.
- Pharmacy, National College of, 179.
- Trustees, 179.
- Faculty, 179.
- Calendar, 180.
- Admission Requirements, 180.
- Qualifications for Degree, 181.
- Instruction, 181.
- Fees, 183.
- Students, 251.
- Philosophy, 111.
- Physics, 113.
- Phi Delta Phi Prize, 132.
- Physical Diagnosis, 154.
- Physiology, 148, 168.
- Political Science, 114.
- Powell, Admiral, Scholarship, 61.
- President, 20.
- President's Council, 26.
- Members, 31.
- Committees, 31.
- Preventive Medicine, 116.
- Prizes:
  - Arts and Sciences, 63.
  - Law, Law School, 131.
  - Medicine, Medical School, 162.
- Prophylaxis, Oral, 173.
- Prosthetic Dentistry, 167.
- Technics, 171.
- Psychiatry, 154.
- Psychology, 111.
- Religious Work, 65.
- Romance Languages, 117.
- Ruggles Prizes, 63, 65.
- Scholarships:
  - Arts and Sciences, 60.
- Schools:
  - Organization, 25.
  - Graduate Studies, 45.
- Secretary, 22.
- Sociology, 93.
- Spanish, 118.
- Special Students, 60, 123.
- Staughton Prize, 63, 65.
- Sterrett, J. M. Jr., Prize, 64, 65.
- Stone, Mary Lowell, Scholarship, 61.
- Students, List of:
  - Graduate Studies, 199.
  - The Colleges, 205.
- Students, List of:
  - Law School, 230.
  - Medical School, 245.
  - Dental School, 249.
  - Pharmacy, 251.
  - Veterinary Medicine, 253.
- Summaries:
  - General, 256.
  - Arts and Sciences, 229.
  - Law School, 243, 244.
  - Medical School, 249.
  - Dental School, 251.
  - Pharmacy, 253.
  - Veterinary Medicine, 254.
- Surgery, 145.
- Oral, 169.
- Surgical Pathology, 156.
- Teachers Appointment Bureau, 85.
- Teachers College, 83.
- Faculty, 45.
- Admission Requirements, 83.
- Graduation Requirements, 84.
- Teacher's Diploma, 85.
- Appointment Bureau, 85.
- Scholarships and Prizes, 60.
- Fees, 66.
- Students, 199.
- Teacher's Diploma, 85.
- Technics, 171.
- Therapeutics, 151, 169.
- Treasurer, 22.
- Tropical Medicine, 153.
- Trustees, University Board of:
  - Members, 28.
  - Alumni Membership, 19.
  - Officers, 29.
  - Committees, 29.
  - By-Laws, 20.
- Trustees:
  - Pharmacy, 179.
  - Veterinary, 184.
- University Aid, 61.
- University Scholarships, 59.
- Veterinary Medicine, College of, 184.
- Trustees, 184.
- Faculty, 184.
- Admission Requirements, 185.
- Graduation Requirements, 194.
- Instruction, 186.
- Fees, 195.
- Students, 253.
- Walsh, T. F., Prize, 63, 65.
- Walker Scholarship, 61.
- Withdrawals, 67, 133, 163, 175.
- Withington Scholarship, 61.
- Zoology, 89.



























UNIVERSITY OF ILLINOIS-URBANA



3 0112 111803869